**Escherichia coli O157:H7 (E. coli O157) Infection and Hemolytic Uremic Syndrome (HUS)**

**What is it?**
*Escherichia coli O157:H7 (E. coli O157)* is one of hundreds of strains of the bacterium *Escherichia coli*. Most strains of *E. coli* are harmless and live in the intestines of healthy humans and animals. However, the O157 strain produces a powerful toxin that can cause severe illness.

**What are the symptoms?**
Symptoms of *E. coli* O157 infection include severe diarrhea (often bloody) and abdominal cramps. Most people infected with *E. coli* O157 do not have a fever or vomiting.

Symptoms usually begin 2 to 5 days after exposure to the bacteria. Sometimes people infected with *E. coli* O157 have no symptoms at all, but can still pass the bacteria to others.

In some people, especially in children under 5 years old and the elderly, *E. coli* O157 infections can cause a complication called Hemolytic Uremic Syndrome (HUS). About 2 – 7% of *E. coli* O157 infections lead to HUS. HUS occurs when the *E. coli* O157 toxin destroys red blood cells. HUS can lead to kidney failure, neurologic damage, and in some cases, death. Approximately 5 – 10% of HUS cases are fatal.

**How long does it last?**
Symptoms usually last 5 to 10 days. People with mild symptoms usually recover on their own without treatment. Antibiotics are not helpful for treating *E. coli* O157 infections, and may even increase the likelihood of developing HUS. Antidiarrheal agents should not be used either.

**How is it spread?**
*E. coli* O157 lives in the intestines of healthy cattle and other animals. *E. coli* O157 can be found in water, food, soil, or on surfaces that have been contaminated with animal or human feces. Family members and playmates of children infected with *E. coli* O157 are at high risk of becoming infected.

People can become infected by:
- Eating contaminated food, such as:
  - undercooked hamburger
  - raw produce items, such as sprouts and lettuce
- Drinking unpasteurized milk, juice, or cider.
- Swallowing recreational water contaminated with *E. coli* O157 (recreational water includes lakes, streams, rivers, springs, ponds, swimming pools, hot tubs, Jacuzzis, and water park fountains).
- Contact with farm animals or pets.
- Touching contaminated surfaces or objects and then touching their mouth or putting a contaminated object into their mouth.
- Not washing hands after using the bathroom or changing diapers and then eating foods.

**What should I do if I have symptoms?**
- Contact your health care provider. Note that antibiotic treatment is not helpful for *E. coli* O157 infections, and may be harmful in some cases.
- Wash your hands often.
- Do not send your child to daycare or preschool if he or she has diarrhea.
How can I prevent *E. coli* infections?

- Wash your hands with warm, soapy water for at least 20 seconds
  - After using the bathroom
  - After changing diapers
  - After contact with animals or their environment
  - Before eating
- Supervise young children to be sure they properly wash their hands.
- Wash your hands more often when someone in your household is sick.
- Cook all ground beef and hamburger products to at least 160°F. Do not eat hamburgers if they are pink in the middle.
- Prevent cross-contamination in the kitchen by washing hands, cutting boards, countertops, knives, utensils, and surfaces with warm, soapy water after handling raw foods.
- Separate raw meats, poultry, and seafood from vegetables and cooked foods.
- Wash and/or peel fruits and vegetables before eating them.
- Do not drink unpasteurized milk, juice, or cider.
- Clean and disinfect surfaces with household bleach immediately after vomiting or diarrheal accidents.
- Don’t drink untreated water from lakes, rivers, streams, ponds, or shallow wells.

**Healthy Swimming Tips:**

- Do not swallow water or get water in your mouth while swimming.
- Take a shower before and after swimming.
- Do not swim when you have diarrhea.
- When swimming, take your kids on frequent bathroom breaks – waiting to hear “I have to go” may mean that it’s already too late.
- Change diapers in changing rooms, not poolside or on the beach. Wash hands after changing diapers.

To report a suspected foodborne illness, call the Minnesota Department of Health Foodborne Illness Hotline at 1-877-FOOD-ILL (or 651-201-5655 from the Twin Cities).