

***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.



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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).