

Escherichia coli O157:H7

What is *Escherichia coli* O157:H7?

Escherichia coli O157:H7 (*E. coli* O157:H7) is a bacteria that causes illness in people. Although most strains are harmless and live in the intestines of healthy humans and animals, *E. coli* O157:H7 produces a powerful toxin and can cause severe illness (i.e., kidney failure). The combination of letters and numbers following the name of the bacterium refers to the specific markers found on its surface and distinguishes it from other strains of *E. coli*.

How is it transmitted?

E. coli O157:H7 is transmitted via ingestion of contaminated meat, milk, sprouts, lettuce (produce fertilized with infected cow manure), salami, unpasteurized juice, and swimming in or drinking sewage contaminated water.

What are common symptoms?

Symptoms will begin two to eight days after infection and include watery or bloody diarrhea, low-grade fever, and vomiting. Illness may be mild or severe. Children are more likely to have severe symptoms, including kidney failure and rarely death.

Will my pet develop an infection?

E. coli O157:H7 is most commonly found in the intestines of ruminants (cows, sheep, and goats). Occasionally, other animals will be infected. Animals infected with *E. coli* O157:H7 are not ill; therefore, you cannot identify a sick animal by looking at them.

How is it diagnosed?

E. coli is diagnosed by detecting the bacteria in the stool.

How can it be treated?

Most people recover without antibiotic therapy. Antibiotic treatment is controversial. It is thought that treatment with some antibiotics may precipitate kidney complications. The best remedy is supportive care with plenty of fluids to prevent dehydration.

Can it be prevented?

- Cook all beef and hamburger thoroughly.
- Avoid cross contamination in your kitchen - keep raw meat separate from ready-to-eat foods.
- Wash hands, counters, and utensils with hot soapy water after being in contact with any raw meat.
- Drink only pasteurized milk and juices, including ciders.
- Wash fruits and vegetables thoroughly, especially those that will not be cooked.
- Drink municipal water that has been treated with chlorine or other effective disinfectants.
- Avoid swallowing lake or pool water.
- Make sure that persons with diarrhea, especially children, wash their hands carefully with soap and water after bowel movements to reduce the risk of spreading infection, and that persons wash hands after changing soiled diapers.
- Wash hands after handling or touching cattle, sheep,

This fact sheet provides general information. Please contact your physician or veterinarian for specific information related to you or your animals.

For more information go to:

- **Centers for Disease Control**
www.cdc.gov

• **National Association of State Public Health Veterinarians** www.nasphv.org