

E. coli* O157:H7*What is *E. coli* O157:H7 and what causes it?**

Escherichia coli (Esh-e-rik-E-a coe-lie) O157:H7 or *E. coli* O157:H7 is a toxin producing bacteria that causes intestinal disease in people which lasts about one week. Diarrhea with blood is typical. Severe cases can lead to kidney problems which can be life-threatening, especially in children or the elderly.

There are many types of *E. coli* bacteria. The designation O157:H7 refers to the way scientists classify various *E. coli* bacteria. Some types of *E. coli* are normally found in the intestines of people and animals but do not cause illness.

What animals get *E. coli* O157:H7?

E. coli O157:H7 does not cause illness in animals, but the animals can serve as carriers of the bacteria. These bacteria can be found in cattle, sheep, pigs, deer, dogs and poultry. Infected animals, especially young ones, can shed the bacteria in their feces. Cattle are the main carriers.

How can my animal get *E. coli* O157:H7?

Animals, particularly livestock, get *E. coli* O157:H7 by ingesting (**oral**) the bacteria in the feces of infected animals, or by exposure to items contaminated with feces (e.g. food or water) or non-living objects (**fomites**).

How does *E. coli* O157:H7 affect my animal?

Currently, there is no evidence that *E. coli* O157:H7 causes illness in animals. They only serve as carriers (or reservoirs) of the organism.

Can I get *E. coli* O157:H7?

Yes. Infection can occur from ingesting (**oral**) contaminated food, particularly raw or undercooked ground beef. **Direct contact** with the feces of infected animals can also be a source of exposure.

Illness usually starts 1 to 2 days after exposure, with abdominal pain and cramping and watery diarrhea with blood. In adults, the infection clears on its own in about a week.

In young children (under 10) and the elderly, serious complications involving the kidneys can develop in a small percentage of cases.

Who should I contact, if I suspect *E. coli* O157:H7?**In Humans –**

Contact your physician.

How can I protect my animal from *E. coli* O157:H7?

Exposure in animals can be minimized by preventing fecal contamination of feed and water. This can reduce the chance for ingestion of the bacteria.

How can I protect myself from *E. coli* O157:H7?

Human disease from *E. coli* O157:H7 is most often associated with eating improperly cooked meat, particularly ground beef, or from products such as unpasteurized milk and some processed meats.

Use safe food preparation techniques. Wash your hands and all cooking equipment with soap and warm water after handling raw meat. Thaw meats in the refrigerator, never on the counter. Avoid cross contamination in the kitchen by using separate cutting boards for meats and vegetables. Cook meat thoroughly and to the proper cooking temperatures (check meat with a thermometer). Drink only pasteurized milk, juices, and cider. Wash your hands frequently after handling animals. Wear disposable gloves if you are in contact with sick animals and always wash your hands after touching animals.

For More Information

CFSPH Technical Fact Sheets. *Escherichia coli* O157:H7 at <http://www.cfsph.iastate.edu/DiseaseInfo/>

CDC website. *E. coli* O157:H7 at http://www.cdc.gov/ncidod/dbmd/diseaseinfo/escherichiacoli_g.htm

USDA Bad Bug Book at <http://www.cfsan.fda.gov/~mow/chap15.html>

