

ESCHERICHIA COLI O157:H7 ***E. coli O157:H7***

What is *Escherichia coli O157:H7*?

Escherichia coli O157:H7 (*E. coli O157:H7*) is one of hundreds of strains of the bacterium *Escherichia coli* (*E. coli*). Although *E. coli* of many types live in the intestines of healthy humans and animals, this strain produces a powerful toxin and can cause severe illness.

How is *E. coli O157:H7* spread?

Most illness has been due to eating undercooked ground beef. Other cases have been traced to drinking unpasteurized apple juice/cider, raw milk, eating produce contaminated by animal feces, and recreational exposure in contaminated water. Person-to-person contact in families and childcare centers due to poor personal hygiene and inadequate hand washing can cause further transmission.

What are the symptoms of *E. coli O157:H7*?

E. coli O157:H7 infection causes abdominal cramps and diarrhea, which is sometimes bloody. There is little or no fever present, and the acute illness is generally gone in five to ten days.

In children under five years of age and the elderly, the infection can cause a complication called hemolytic uremic syndrome, in which the red blood cells are destroyed and the kidneys fail. About two percent to seven percent of infections lead to this complication.

How is the illness treated?

Most persons recover in five to ten days without antibiotics or other specific treatment. Avoid taking drugs that stop the diarrhea by affecting gut motility (that would “paralyze” the gut). There is no evidence that antibiotics improve the course of disease, and it is thought that treatment may actually predispose to development of hemolytic uremic syndrome, a life-threatening condition.

What can you do to prevent *E. coli O157:H7* infection?

Cook all ground beef and hamburger thoroughly. Ground beef should be cooked until a thermometer inserted into the thickest part of the patty reads at least 160° F on a digital thermometer or until the patty is no longer pink inside.

Drink only pasteurized milk, apple juice, or cider. Commercial juice with an extended shelf life that is sold at room temperature (e.g., juice in cardboard boxes, vacuum-sealed juice in glass containers) has been pasteurized, although this is generally not indicated on the label. Juice concentrates are also heated sufficiently to kill pathogens.

Wash fruits and vegetables thoroughly, especially those that will not be cooked. Raw sprouts can carry *E. coli* O157 and therefore should be avoided, especially by children under five years of age, immunocompromised persons, and the elderly, all of whom are at risk of serious disease if infection occurs.

Where can I find more information on *E. coli* O157:H7?

The Centers for Disease Control and Prevention has information available at their website http://www.cdc.gov/ncidod/diseases/submenus/sub_ecoli.htm.