

***E. coli* O157:H7 and Shiga toxin-producing *E. coli* (STEC)**

Fact Sheet

***E. coli* O157:H7 and other strains of *E. coli* that produce Shiga toxins are collectively known as Shiga toxin-producing *E. coli* (STEC).**

Most strains of *E. coli* are harmless and live in the intestines of healthy animals and humans. STEC are strains of *E. coli* that produce a toxin and can cause severe illness.

People usually become infected with STEC by eating contaminated food.

The organism can live in the intestines of healthy cattle. Eating meat (especially ground beef) that is rare or undercooked is the most common way of becoming infected. Drinking unpasteurized milk or juices, and drinking or swimming in sewage-contaminated water can also cause infection. The bacteria are present in an infected person's feces (stool) and may be spread from person to person.

STEC can cause severe bloody diarrhea and abdominal cramps.

Sometimes infection causes non-bloody diarrhea or no symptoms. Symptoms usually begin 3 to 4 days after exposure but can range from 1 to 10 days. Hemolytic uremic syndrome (HUS) is a serious complication that occurs in some infected people, particularly children under 5 and the elderly. In this syndrome, red blood cells are destroyed, and kidney failure occurs.

Infection can be diagnosed by detecting the bacterium in the stool.

Your health care provider can request a special test for STEC from a laboratory.

See your doctor if you think you may have this infection

- Most people recover without specific treatment in 5 to 10 days. Fluid and electrolyte replacement is important when diarrhea is watery or there are signs of dehydration. Antidiarrheal agents should be avoided. Antibiotics may actually worsen the disease.
- HUS is a life-threatening condition that is usually treated in an intensive care unit.
- If food handlers, health care and childcare workers, children in childcare, or anyone in the family of such people have an STEC infection, they should contact their local health department to get specific recommendations.

Infection with STEC can be prevented by:

- Eating only thoroughly cooked meat and poultry (using a meat thermometer is the only way to ensure that food is thoroughly cooked).
- Consuming only pasteurized milk and dairy products, and juices.
- Eliminating cross-contamination from raw foods to cooked ones by thoroughly washing cutting boards and utensils, and by discarding used meat packages.
- Avoiding sewage-contaminated water.
- Washing all fruits and vegetables before eating.
- Washing your hands thoroughly with soap before and after handling food, before eating, and after using the toilet or changing diapers.