

IDRS Infectious Disease Reporting System

Disease Reporting 24 Hours a Day

Columbus Public Health and Franklin County Public Health

SHIGA-TOXIN PRODUCING E. COLI (STEC)

E. Coli 0157:H7 is one of hundreds of strains of the bacterium Escherichia coli. Although most strains are harmless and live in the intestines of healthy humans and animals, some strains produce a powerful toxin (poison) and can cause severe illness. These strains are called shiga-toxin producing E. coli (STEC).

Symptoms

Symptoms can appear between 10 hours to 8 days after exposure, but usually between 3-4 days

- Diarrhea (often bloody) and stomach cramps
- Slight fever (often no fever)
- People may still carry the bacteria for several days or weeks after getting better.
- In rare cases, the infection can also cause a complication called hemolytic uremic syndrome (HUS), in which blood cells are destroyed and the kidneys fail. Signs of HUS, such as paleness and making less urine than usual, start a few weeks after diarrhea.

Transmission

- Undercooked ground beef is the most common source of infection. Even one drop of raw meat juice is enough to make you sick and contaminate any foods, plates, or utensils that touch it.
- Milk can also be contaminated unless it is pasteurized to kill the bacteria.
- Water can also carry the bacteria, especially well water or untreated water from lakes or streams. Humans can get sick by drinking or accidentally swallowing water while swimming.
- E. coli can also spread from person to person when hands, surfaces, or objects become contaminated with stool (poop) from an infected person. Later, other people may touch these items and unknowingly transfer the bacteria to their mouths or to food.

Treatment

- Certain laboratories can test for STEC bacteria by examining a stool (poop) sample.
- Most persons recover without medicine in 5-10 days. A physician should decide whether the ill person should take an antibiotic. The antibiotic may make the illness longer and possibly cause complications.
- Drink plenty of fluids to prevent dehydration (fluid loss). Do not use anti-diarrhea medicines. These may make the infection last longer.
- If the person develops HUS, they need hospital care, and possibly blood transfusions and kidney dialysis.

Prevention

- Ground beef should be cooked until a thermometer stuck into the thickest part reads at least 160° F. If you don't have a thermometer, make sure the meat is gray or brown all the way through.
- Wash hands thoroughly using soap and warm water after going to the bathroom, changing a diaper, before preparing or eating food, and after contact with animals or areas where animals live.
- Clean all utensils and surfaces after contact with raw meat. Keep raw meat separate from raw foods.
- Drink only pasteurized milk. Eat only milk products (such as cheese) made with pasteurized milk.
- Avoid swallowing water when swimming or playing in lakes, streams, swimming pools, and "kiddie" pools.

People with STEC who attend a child care center or who work in food service, patient care, or child care should stay home until the diarrhea is gone. Ohio Law says they need to have two stool samples without STEC before returning to work or child care.

All information is general in nature and is not intended to be used as a substitute for appropriate professional advice.



c/o Franklin County Public Health, 280 East Broad Street, Columbus, Ohio 43215-4562

Call: (614) 525-8888 • After Hours: (614) 525-3965 • Fax: (614) 525-8890

Email: idsr@franklincountyohio.org • Web: www.idrsinfo.org

