

# SHIGA TOXIN-PRODUCING ESCHERICHIA COLI (STEC) FACT SHEET

## What are *Escherichia coli* (*E. coli*)?

*E. coli* consists of a diverse group of bacteria that are found in the environment, foods, and intestines of people and animals. Although most strains of *E. coli* are harmless, others such as STEC can make you sick. The most commonly identified STEC in North America is *E. coli* O157:H7 (also known as *E. coli* O157). STEC live in the guts of ruminant animals, including cattle, goats, sheep, deer, and elk. The major source for human illnesses is cattle. STEC that cause human illness generally do not make animals sick. Other kinds of animals, including pigs and birds, sometimes pick up STEC from the environment and may spread it.

## Who can get STEC?

Anyone. Very young children and the elderly are more likely to develop severe illness and hemolytic uremic syndrome (HUS) than others, but even healthy older children and young adults can become seriously ill.

## What are the symptoms of STEC?

The symptoms often begin slowly with mild belly pain or non-bloody diarrhea that worsens over several days. Around 5–10% of those who are diagnosed with STEC infection develop a potentially life-threatening complication known as HUS. HUS, if it occurs, usually develops 7 days after the first symptoms, when the diarrhea is improving.

## How soon do symptoms appear?

Symptoms usually begin within 3–4 days after the exposure, but may be as short as 1 day or as long as 10 days.

## How is STEC spread?

A person can become infected with STEC by getting tiny (usually invisible) amounts of human or animal feces in your mouth. Exposures that result in illness include consumption of contaminated food, unpasteurized (raw) milk, consumption of water that has not been disinfected (such as swallowing lake water while swimming), contact with cattle, or contact with the feces of infected people. The major source for human

illnesses is cattle. STEC that cause human illness generally do not make animals sick. Other kinds of animals, including pigs and birds, sometimes pick up STEC from the environment and may spread it.

## How is STEC treated?

There is no specific treatment for STEC, but it is important to drink plenty of water. Antibiotics should not be used to treat this infection. Contact your healthcare provider if you have diarrhea that lasts for more than 3 days, or it is accompanied by high fever, blood in the stool, or so much vomiting that you cannot keep liquids down and you pass very little urine.

## How can people protect themselves against STEC?

The following steps can help protect you against STEC:

- Wash your hands frequently with soap and water, scrubbing your hands for at least 20 seconds. This is particularly important to do after using the bathroom, changing diapers, and contact with animals or their environments (at farms, petting zoos, fairs, even your own backyard) and before preparing or eating food.
- Cook meats thoroughly. Ground beef should be cooked to a temperature of at least 160°F.
- Avoid raw milk, unpasteurized dairy products, and unpasteurized juices (like fresh apple cider).
- Avoid swallowing water when swimming or playing in lakes, ponds, streams, swimming pools, and backyard “kiddie” pools.
- Prevent cross contamination in food preparation areas by thoroughly washing hands, counters, cutting boards, and utensils after they touch raw meat.

## Where can I get more information?

Information about STEC and other related health topics can be found at [www.cdc.gov](http://www.cdc.gov). The District of Columbia Department of Health promotes the health and safety of the District residents. For additional information, please email us at [foodborne.epi@dc.gov](mailto:foodborne.epi@dc.gov).