

A SNAPSHOT OF

SHIGA-TOXIN PRODUCING *E. COLI* (STEC)**What is Shiga-toxin Producing *E. coli* (STEC)?**

It is a type of *E. coli* that causes disease by producing a toxin known as Shiga-Toxin. It includes the O157:H7 strain as well as some non-O157 strains. The combination of letters and numbers in the name of the bacterium refers to the specific markers found on its surface which distinguish it from other types of *E. coli*. Although most strains of *E. coli* are harmless and live in the intestines of healthy humans and animals, STEC can cause severe illness. *E. coli* O157:H7 was first recognized as a cause of illness in 1982 during an outbreak of severe bloody diarrhea; the outbreak was traced to contaminated hamburger. There is still much to learn about non-O157 STEC infections. The most common non-O157 serogroups are: O26, O103 and O111.

Who gets STEC infection?

Anyone of any age can become infected with Shiga-toxin producing *E. coli*. However, young children and the elderly are more likely to develop serious complications.

How does one get infected with STEC?

The infection is usually acquired by eating food or drinking liquids containing the bacteria. The bacteria live in the intestine of some healthy cattle, and contamination of meat may occur in the slaughtering process. Eating undercooked meat is the most common way of getting the infection. Person-to-person transmission can occur if infected persons do not wash their hands after using the toilet. Drinking unpasteurized milk or fruit juice, swimming in or drinking sewage-contaminated water, and eating contaminated fruits or vegetables such as alfalfa sprouts can also cause infection.

What are the symptoms of STEC infection?

People infected STEC can develop a range of symptoms. The most common symptoms are abdominal cramping, vomiting, diarrhea and bloody diarrhea. High fever is uncommon. Persons are usually better within 5-7 days.

How soon after the exposure do symptoms appear?

Symptoms appear about three days after exposure, with a range of one to nine days.

What is the treatment for infection with STEC?

Most people recover without antibiotics or other specific treatment within five to ten days. There is no evidence that antibiotics improve the course of disease, and it is thought that treatment with some antibiotics may precipitate kidney complications. Antidiarrheal agents, such as loperamide (Imodium), should also be avoided. Hemolytic uremic syndrome is a life-threatening complication that may require intensive care unit treatment. Blood transfusions and kidney dialysis are often required. With intensive care, the death rate for hemolytic uremic syndrome is three to five percent.

Where can I get more information?

For more information about STEC in Georgia, contact the Division of Public Health at (404) 657-2700