



SHIGA TOXIN-PRODUCING *E. COLI* (STEC)

What is Shiga Toxin-Producing *E. coli* (STEC)?

E. coli are a diverse group of bacteria that normally live in the intestines of humans and animals. Although most strains of these bacteria are harmless, some produce toxins that can make you sick and cause diarrhea (loose stools) such as Shiga Toxin-producing *E. coli* (STEC). *E. coli* O157:H7 is the most common strain of STEC.

Who gets STEC?

People of any age can become infected. 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.

How is STEC spread?

People become infected with STEC when they eat any product contaminated with the bacteria. The bacteria live in the intestines of healthy cattle, and contamination of their meat may occur during the slaughtering process. Infection most typically occurs by eating contaminated food, particularly raw or undercooked meat. Infection can also occur after eating any product contaminated with STEC, such as lettuce, alfalfa sprouts, salami, and raw (unpasteurized) milk, juice, or cider. Infected people can spread *E. coli* to other people if they do not wash their hands after using the toilet.

What are the symptoms of STEC?

The symptoms of STEC infections vary for each person but often include severe stomach cramps, diarrhea (often bloody), and vomiting. If there is fever, it usually is not very high (less than 101 degrees Fahrenheit). Most people get better within five to seven days. Some infections are very mild, but others are severe and life-threatening.

How soon do symptoms appear?

Symptoms typically appear three to four days after eating (or having direct contact with) a contaminated product. Symptoms last from one to 10 days.

Should an infected person be excluded from work or school?

School and work exclusion policies differ by local jurisdiction. Most infected people may return to work or school when they recover, as long as they carefully wash hands after toilet use. Children in daycare and other sensitive situations should contact the Division of Public Health's Office of Infectious Disease Epidemiology at 1-888-295-5156 before returning to their routine activities. Food handlers may not return to work until three back-to-back negative stool sample are analyzed by a laboratory. Good handwashing after changing diapers, after using the toilet, and before and after preparing food is essential to prevent the spread of these and many other infections.



Frequently Asked Questions

What is the treatment for STEC?

There is no specific treatment for STEC infections. Since diarrhea can cause dehydration (loss of water in the body causing weakness or dizziness), it is important to drink plenty of fluids to stay hydrated. Antibiotics should not be used for the treatment of STEC infection since there is no evidence that antibiotics are helpful with these infections and may increase the risk of developing HUS.

What can a person or community do to prevent the spread of STEC?

- Wash your hands thoroughly after using the bathroom or changing diapers and before preparing or eating food. Wash hands after contact with animals or their environments: at farms, petting zoos, fairs, and even your own backyard.
- Cook meats thoroughly. Ground beef and meat that has been needle-tenderized should be cooked to a temperature of at least 160 degrees Fahrenheit (70 degrees Celsius). It is best to use a thermometer, as color is not a very reliable indicator of “doneness.”
- 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.

Resources

Centers for Disease Control and Prevention, <https://www.cdc.gov/ecoli/general/>