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What is Shiga Toxin-producing *Escherichia coli* (STEC)?

Escherichia coli (also called *E. coli*) are bacteria that normally live in the intestines of humans and animals such as cows. Most strains of the *E. coli* bacteria do not cause illness. However, strains that produce toxins can lead to illness. The most common type of toxin-producing *E. coli* is referred to as Shiga toxin-producing *E. coli* (STEC). *E. coli* O157:H7 is the most common type of STEC, but other types exist.

Who gets STEC?

Anyone can get an STEC infection, but young children, older adults, and those with weakened immune systems are more likely to have severe illness.

How is STEC spread?

STEC must enter the mouth to cause infection. People and animals infected with STEC shed the bacteria in their feces (stool). The feces can then contaminate surfaces, food, or water. People can become infected by touching contaminated surfaces, getting the bacteria on their hands and then putting their hands in their mouths, or by eating contaminated food or drinking contaminated water. Infected food handlers can contaminate food if they handle food that other people eat without properly washing their hands after going to the bathroom. In childcare centers, the bacteria can spread when diaper changes lead to contamination of hands or surfaces.

STEC has been associated with people eating contaminated products, such as undercooked ground beef, raw produce (e.g., sprouts, lettuce, and spinach), or raw dough or batter, or drinking unpasteurized (raw) milk or juice. It has also been associated with people swimming in water that has been contaminated with feces. Animal-to-human spread can occur by touching contaminated surfaces or animals (e.g., at agricultural fairs, petting zoos, or farm visits) and then putting hands in the mouth.

What are the symptoms of STEC infection?

Some people who are exposed to STEC do not become ill. Others develop stomach cramps and bloody diarrhea. Symptoms can also include vomiting, fever, and chills. In severe cases, the infection can damage organs, such as the kidneys.

How soon after exposure do symptoms appear?

Symptoms can appear anywhere from one to ten days after exposure, but usually appear around three to four days after exposure.

How is STEC diagnosed?

Special laboratory testing of a stool sample is needed to confirm that a person has been infected with STEC.

What is the treatment for STEC?

Persons with diarrhea should drink plenty of liquids to prevent dehydration. Most people get well within one week without being seen by a physician, but it is important for anyone with bloody diarrhea to seek medical attention. Antibiotics or drugs that stop diarrhea (e.g., Imodium) should not be used.

How can STEC infection be prevented?

STEC infection can be prevented by taking the following precautions:

- Never eat rare or undercooked ground beef.
- Cook ground beef or pork to a minimum internal temperature of 160°F.
- Keep raw meat separate from ready-to-eat meals.
- Wash hands, counters, utensils, and plates after contact with raw meat.
- Always refrigerate meat products.
- Never leave raw meats at room temperature.
- Do not drink milk, milk products, fruit juices, or ciders that have not been pasteurized.
- Always wash raw fruits or vegetables before eating.
- Always carefully wash hands before and after preparing foods.
- Always carefully wash hands with soap and water after using the toilet or changing diapers.
- Wash hands after animal contact and after visiting farms, petting zoos, and agricultural fairs.
- Clean and disinfect diapering areas, toilets, potty chairs, toys, etc. at least daily and when soiled.
- Make sure children wash their hands carefully, especially after using the toilet or touching animals.
- Do not use public swimming facilities while having diarrhea.
- Avoid swallowing water from a swimming pool or other recreational bodies of water.

How can I get more information about STEC?

- If you have concerns about STEC, contact your healthcare provider.
- Call your local health department. A directory of local health departments is located at the [VDH Local Health Districts page](#).
- Visit the Centers for Disease Control and Prevention website at [the CDC page on *E. coli*](#).

Translations

[Escherichia coli STEC Fact Sheet in Amharic](#)

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