



Indiana State Department of Health

Epidemiology Resource Center

Quick Facts

About...Shiga toxin-producing *E. coli*

What is Shiga toxin-producing *E. coli*?

Escherichia coli (esh-uh-rik-ee-uh koh-lie) is a bacterium that lives in the intestines of most healthy warm-blooded animals, including humans. There are hundreds of strains of *E. coli*, and most are harmless. There are several types of *E. coli*, such as *E. coli* O157:H7 and other Shiga toxin-producing strains that can cause harmful and spreadable illness in humans. About 8% of people infected with Shiga toxin-producing *E. coli* can get a condition called hemolytic uremic syndrome (HUS). This sickness is very serious and can lead to kidney failure and death.

What are the symptoms of Shiga toxin-producing *E. coli* infection?

- Bloody or non-bloody diarrhea
- Abdominal cramps
- Little or no fever
- Nausea
- Vomiting

Symptoms may not always be the same and often begin 3-4 days (range of 2-10 days) after exposure and last around 5-10 days.

How is Shiga toxin-producing *E. coli* spread?

E. coli is passed in stool, and people become sick by swallowing feces from a sick animal or person (fecal-oral route). A person with this illness can pass the bacteria in their stool for up to 3 weeks after their symptoms have stopped.

There are many ways to become infected with Shiga toxin-producing *E. coli*:

- Eating foods such as undercooked beef, unwashed raw fruits, vegetables, or herbs, and drinking unpasteurized milk and juices.
- Swallowing untreated water, e.g., from lakes or streams.

- Touching the stool of infected animals
- Not washing hands after touching stool from a surface or item that has the bacteria

Who is at risk for getting Shiga toxin-producing *E. coli*?

Anyone can become ill, but young children, older adults, pregnant women, and immune suppressed individuals (such as patients on cancer drugs and with organ transplants) are more likely to get ill. Elderly and very young children are more likely to have severe illness and HUS.

How do I know if I have Shiga toxin-producing *E. coli* infection?

A person having diarrhea lasting longer than 24 hours or having bloody stool should see a doctor right away. The health care provider may collect a stool sample to test for Shiga toxin-producing *E. coli*.

How is Shiga toxin-producing *E. coli* infection treated?

Most people get better without medical treatment. Drinking lots of fluids and non-specific supportive therapy is important. The use of antibiotics or over-the-counter anti-diarrheal agents is not recommended; the use of these can lead to greater likelihood of getting HUS.

How is Shiga toxin-producing *E. coli* infection prevented?

In general, Shiga toxin-producing *E. coli* infection can be prevented by keeping to the following guidelines:

- Properly wash hands with soap and water after using the restroom.
- Clean food preparation work surfaces, equipment, and utensils with soap and water before, during, and after food preparation.
- Separate raw and cooked foods.
- Keep food in safe temperatures.
- Eat foods that are cooked properly, within expiration dates, pasteurized dairy products and juices.
- Wash all produce before eating raw or cooking.
- Wash hands after touching livestock, petting zoos, and pets.
- People with diarrhea and/or vomiting should not prepare food or provide health care for others and should not touch others as much as possible.
- Do not swallow water when swimming or playing in lakes, ponds, or streams.

All information presented is intended for public use. For more information, please refer to: <http://www.cdc.gov/ecoli/>

Food and Drug Administration, Food Facts for Consumers:

<http://www.fda.gov/Food/ResourcesForYou/Consumers/ucm077286.htm>

This page was last reviewed June 2015.