

Shiga-like toxin producing E. coli

Information for Patients

What kind of infection is it?

E. coli is a bacteria that normally lives in the intestines of most people and most types are harmless. Shiga toxin producing *E. coli* (STEC, sometimes called EHEC) are *E. coli* that produce a powerful toxin called shiga toxin that causes painful bloody diarrhea. *E. coli* O157:H7 is the best known type of STEC but there are other types of STEC as well.

How do people get infected?

- o STEC live in the guts of cattle, goats, sheep, deer and elk.
- o People generally become ill after eating food contaminated with STEC. Common sources include undercooked ground beef, unpasteurized ("raw") milk, and unpasteurized juices.
- Other foods can become contaminated with STEC and cause illness. Outbreaks have been caused by lettuce, sprouts and other vegetables.
- o STEC infections can also come from swallowing water in lakes, ponds or pools that have been contaminated with the bacteria by waste from cattle or from infected people.
- o STEC can spread from an infected person to other people who come in contact with their stool (poop) through poor hand washing, changing diapers, etc.
- o STEC can infect people of any age.

What are the usual symptoms?

- o Illness usually starts 2-8 days after exposure.
- Diarrhea that often becomes bloody, severe stomach cramps, vomiting. Fever is uncommon. Illness can be mild or very severe.

How long does it last?

o Typically 4-7 days but may be longer.

How is it treated?

- o Avoid dehydration by drinking fluids. Warning signs of dehydration include dry mouth, decreased urination, or dizziness.
- Antibiotics should not be given to people with STEC infection. They do not help decrease the symptoms and may increase the risk of hemolytic uremic syndrome (HUS). Antidiarrheal medicines like immodium may also increase the risk of HUS.

Are there possible complications?

- About 5-10% of people with STEC infection develop a life threatening complication called HUS. HUS
 causes kidney injury, anemia (decreased red blood cells) and low platelets (a blood cell that helps
 control bleeding).
- Symptoms of HUS to watch for include decreased urination, swelling around the eyes, or severe tiredness. Bring your child to the doctor if you see any of these things. People with HUS should be hospitalized immediately.
- o Most people recover from HUS but it is a serious illness that can cause permanent kidney damage.



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Comments:

- o Wash hands carefully with soap and water after going to the bathroom or changing diapers, cleaning up vomit or stool and after contact with animals at farms, fairs or petting zoos.
- Wash your hands before preparing food and before eating.
- o Avoid undercooked hamburger, unpasteurized dairy products and juices.
- o Avoid drinking water when swimming or playing in kiddie pools, lakes, ponds, or swimming pools.
- Clean contaminated surfaces and disinfect with bleach solution (5-25 tablespoons of household bleach per gallon of water).
- o People with diarrhea should not prepare food.

Resources:

o CDC Handout