

# E. coli (Verotoxigenic) General Information

## What is Verotoxigenic E. coli?

*E. coli* [*Escherichia coli*] are bacteria that normally live in the intestines of humans and animals. Most strains are harmless but some make toxins that can cause diarrhea and more severe illness. One type of these toxin-producing strains is called Verotoxigenic *E. coli*. One of the more common strains is O157:H7.

Verotoxigenic *E. coli* can sometimes make people very sick.

In some people (particularly children under five years of age), Verotoxigenic *E. coli* can cause a hemolytic uremic syndrome (HUS). This happens in about 2-7% of cases. HUS is a serious disease that destroys red blood cells and causes kidney failure. Most people recover from HUS but it can be fatal.

Anyone can get Verotoxigenic *E. coli*.

## How is it spread?

You can get Verotoxigenic *E. coli* by:

- eating undercooked meat, especially ground beef (contaminated meat looks and smells normal)
- drinking unpasteurized milk or juice
- drinking or swimming in water contaminated by sewage
- petting animals that may carry the bacteria

You can also get *E. coli* by coming in contact with the stools of infected persons. This happens when proper hand washing technique is not followed.

Individuals with *E. coli* can still spread the germ for days to weeks after symptoms stop.

## What are the symptoms?

The symptoms include:

- severe bloody diarrhea
- abdominal cramps
- vomiting

Sometimes the infection causes non-bloody diarrhea. Sometimes there are no symptoms. Usually there is little or no fever.

## What is the treatment?

Most persons recover in 5-10 days without treatment. There is no evidence that antibiotics help treat the disease.

## How can you prevent Verotoxigenic *E. coli*?

- Verotoxigenic *E.coli* can be killed by adequate cooking. Use a thermometer to ensure all foods have reached the [required internal cooking temperature](#) and reheat all food to an internal temperature of 74°C [165°F].
- Do not eat undercooked ground beef/hamburger meat and ensure all ground beef products such as burger patties are cooked to an internal temperature of 71°C [160°F].
- Wash raw fruits and vegetables thoroughly with clean, safe running water before you prepare and eat them.
- Keep raw meat in a refrigerator at or below 4°C [40°F] and separate from ready-to-eat foods during thawing and storage.
- Adequately wash hands before preparing food and after handling raw meat, using the bathroom, changing diapers, handling garbage and handling pet food and treats.
- Thoroughly clean work surfaces and utensils used to prepare raw meat and other foods before using them to prepare foods that are cooked lightly or ready-to-eat.
- Keep pets away from food storage and preparation areas and adequately wash hands after handling pet feces and cat litter.
- Persons infected with *E.coli* bacteria or any other gastrointestinal illness should not prepare or serve food to other people or provide personal care for other people.
- Drink water from a safe, treated water supply.
- Avoid swallowing water if you are swimming or bathing in untreated water (natural swimming areas) and do not swim in pools or natural swimming areas if you have diarrhea.
- Eat and drink only pasteurized juice, cider, milk and milk products.
- When travelling, in particular in developing countries, drink water (including ice) from a safe source. Eat only cooked hot food. Eat only fruit that can be peeled.
- Wash hands thoroughly after contact with animals (at home, farms, petting zoos and fairs).

For further information, please refer to Health Canada's Healthy Canadians [E.coli website](#) and the Public Health Agency of Canada's [E.coli Fact Sheet](#).