



Verotoxin-producing E. Coli

What is verotoxin-producing E. coli?

Verotoxin-producing E. coli (VTEC) is a group of bacteria that cause illness in humans. The most commonly found VTEC in North America is *E. coli* O157:H7 which may be found naturally in some animals such as cattle, farmed deer, sheep, horses, goats, dogs, geese, pigs, wild birds, and poultry.

How is it spread?

VTEC is spread by eating food or drinking water contaminated by the bacteria. A very small amount is enough to make you sick. Undercooked meat (particularly ground beef), raw fruits and vegetables, unpasteurized milk and juice and cider have been responsible for causing illness before.

You may also be exposed to the bacteria if you are in contact with the stool of an infected person, child or infant (for example, during diaper changes or sexual contact) and then do not wash your hands well before touching your mouth, nose or eyes, or before preparing or eating food.

What symptoms should I watch for?

Symptoms of illness from VTEC (particularly E.coli O157:H7) include diarrhea, which may be bloody, stomach cramps, and/or vomiting. Fever is rare. Some people who are infected have no symptoms at all. Most people get well in 7 to 10 days.

Some people with VTEC infection may develop a serious kidney condition within two weeks of getting sick called Hemolytic Uremic Syndrome (HUS). Children under 5 years of age and the elderly are more at risk of this complication. Some people may die from the illness. Symptoms of HUS include a decrease in the amount of urine produced, swelling in the face, hands and feet, paleness of the skin, and irritability or fatigue. See your health care provider immediately if you notice any of the symptoms of HUS.

How soon do symptoms of VTEC appear?

Symptoms usually appear 3 to 4 days after ingesting the bacteria, but can start within hours or take up to 10 days.

What is the treatment for VTEC?

See your health care provider to discuss treatment options. Antibiotics and anti-diarrheal agents may not be helpful.

How do I protect myself and others?

- It is important to wash your hands with soap and water after using the toilet, before preparing or eating meals, after handling any raw meats, after handling any soil, fertilizer or mud and after being in close contact with animals.
- Thoroughly cook all meat to recommended temperatures. Check temperatures with an accurate probe thermometer.

| Product | Celsius | Fahrenheit |
|------------------------|---------|------------|
| Whole Chicken & Turkey | 82 | 180 |
| Poultry Breasts | 74 | 165 |
| Pork | 71 | 160 |
| Ground Meat | 71-74 | 160-165 |

- Reheat foods until steaming hot.
- Store raw and cooked food separately. Clean and sanitize utensils used for raw meat before using them for cooked or ready to eat food.
- Thoroughly wash raw fruits and vegetables with clean water before eating, peel them if you can.
- Choose pasteurized milk, juice and cider.
- Do not eat sprouts unless they can be cooked fully.
- Drink water from an approved or chemically treated source. If you are unsure of the safety of your water supply boil your water for 1 minute, or use an approved disinfectant.

Is there anything special I need to know?

It is extremely important that if you have symptoms you take precautions to avoid spreading this illness to others. Some ways to prevent the spread include:

- Frequent (especially after washroom) hand washing with soap and water;
- Avoid preparing food for other people, or wear disposable gloves and follow safe food handling procedures.
- Avoid recreational water, such as pools, for 2 weeks after symptoms resolve.
- Because of the small infective dose, infected persons should not be employed to handle food, provide or attend child care, or provide patient care until 2 successive negative fecal samples or rectal swabs are obtained (collected 24 hours apart and not sooner than 48 hours after the last dose of antimicrobials).

Call the Communicable Disease Team: Ext. 8809