

factsheet

E.coli 0157

What is it?

E.coli 0157 is a strain of bacteria that produces a toxin that forms in and causes severe damage to the lining of the intestines.

The medical name for the disease is Haemorrhagic Colitis. Once the bacteria gets in the food, they grow even at low temperatures. The actual number of bacteria that causes illness is unknown, but it is thought that it takes only a small number to cause serious illness. It is sometimes known as “barbecue season syndrome” because it often occurs during the summer when people cook hamburgers on the barbecue and don’t cook the ground meat well enough.



What are the symptoms?

Anyone can get E. coli 0157. Symptoms can occur from one to 14 days after consuming contaminated food. Symptoms include severe stomach cramps and watery diarrhea, that can progress to severe bloody diarrhea. Most people recover without problems but the disease can be more severe, particularly in children and the elderly. An unusual form of kidney failure called hemolytic uremic syndrome (HUS) can occur.

Where does the disease come from?

The bacteria can live in the intestines of most food animals, including beef, pork, and poultry products, and in humans. While illness caused by E.coli 0157 has been linked to undercooked beef, unpasteurized milk or apple cider, dry cured sausage, and contaminated fruits and vegetables have been implicated. Infection may also be spread by hand contact of an infected person with food or through contaminated surfaces.

How do you avoid getting this disease?

Nova Scotia has over 550 suspected cases of food poisoning reported each year. As many cases go unreported, it is estimated there may be closer to 18,000 cases. Many of these cases were linked to undercooked ground beef. Your best protection against the risk of infection with E. coli 0157 is:

- When barbecuing or cooking ground meat such as hamburger, cook the meat thoroughly at the center (71°C or 160°F). Meat and juices should be brown, not red or pink.
- Wash hands thoroughly BEFORE handling food, and AFTER handling raw meat, and AFTER using the toilet.
- Thaw frozen meat in the refrigerator not on the counter.
- DON’T allow raw meat to sit at room temperature — either cook hamburger patties right away, or refrigerate them until you are ready to cook.
- Make sure neither raw meat or their juices come into contact with other foods. Place raw meats on the lowest rack in the refrigerator to avoid juices spilling on other foods.
- Wash and sanitize dishes, cutting boards and counters after using them to prepare raw meat. A sanitizing solution can be mixed by adding 1 ½ teaspoons of household bleach to one litre of water.
- NEVER ORDER OR ACCEPT undercooked ground meat products in an eating establishment.
- Never place cooked meat on the same plate used to carry raw meat. People often make this mistake when barbecuing.
- Wash all fruits and vegetables before eating. Drink only juice/cider that is shelf stable or has been pasturized.

Why the ground meat connection?

Ground beef is particularly hazardous, compared to whole pieces of meat like steaks or chops and can be a major cause of foodborne illness caused by E.coli 0157. This is because the bacteria which get onto the surfaces of meat during butchering, get mixed through the meat during the grinding process. That is why it is particularly important for hamburgers to be cooked through.

For further information on food safety visit the Nova Scotia Department of Agriculture Food Safety website at <http://www.gov.ns.ca/nsaf/foodsafety/>