

Hamburger Disease (Haemorrhagic Colitis)

What is hamburger disease?

The medical name for hamburger disease is Haemorrhagic Colitis. This disease is a type of food poisoning caused by a bacteria called E.coli 0157:H7. Also known as just E.coli, it can be found in many foods including meat, and especially in ground beef.

Hamburger disease is also known as 'barbecue season syndrome' because it often happens when people cook hamburgers on barbecues and don't cook them properly.

What are the symptoms?

Symptoms of E.coli infection include watery diarrhea, which in serious cases may become bloody. There may also be vomiting, stomach cramps and a mild fever.

The symptoms start about two days after eating food contaminated with E.coli, and usually last between 5 and 10 days.

In a few cases, the E.coli toxin (or poison) can cause a serious and sometimes fatal illness called Hemolytic Uremic Syndrome (HUS). This can result in kidney failure, anemia and internal bleeding. HUS can be especially dangerous to young children and the elderly.

Where does the disease come from?

E. coli can be found in the stomachs and manure of most food animals, including pork, poultry, and especially beef products.

During the butchering process, E.coli sometimes gets onto the surfaces of the meat. When the meat is ground, E. coli are mixed throughout the meat. This is why ground meat

is more likely to cause illness than whole cuts of meat like steaks or roasts. Whole cuts of meat usually only have E. coli on the surface, which makes them easier to kill by cooking. In ground meat, unless the interior is properly cooked, any E. coli there can survive.

E. coli is also sometimes found on other foods including fruits and vegetables and unpasteurized milk, juice, and ciders.

How do I avoid getting sick?

In British Columbia, about 175 cases of hamburger disease are reported every year. It is thought that there are thousands of other cases that are not reported to local health officials.

To reduce the risk of E. coli poisoning:

- Refrigerate or freeze meat as soon as possible after buying it.
- Thaw meat in the refrigerator, **not** at room temperature.
- Always thaw meat thoroughly before you start to cook it. Do not try cooking frozen or partially frozen meat.
- Wash your hands thoroughly **before** preparing food, **after** handling raw meat, and **after** using the toilet. E.coli can also be spread to others through infected feces.
- If you do not cook hamburger patties right away, keep them in the refrigerator until you are ready to cook them. Do not let raw meat sit at room temperature.
- Always wash and sanitize all utensils, cutting boards and counters that have

touched raw meat to prevent E. coli from contaminating other foods. You can make an effective sanitizing solution by mixing one half ounce of bleach in a gallon of water or a teaspoon of bleach in a litre of water.

- Properly cook the outside of all whole cuts of meats such as steaks, roasts, or chops.
- Cook ground beef, such as hamburger patties or meat loaf, until the centre is brown, not pink, and the juices run clear. The middle of the patty must reach a temperature of 71 degrees Celsius (160 Fahrenheit) or hotter and held there for at least 15 seconds.
- Properly cook poultry so that the middle of the thickest piece of meat reaches 74 degrees Celsius (165 Fahrenheit) or hotter and held there for at least 15 seconds. The juices should run clear, and the meat should pull easily from the bone. Poultry meat should not be rubbery.
- Never put cooked meat back on the same unwashed utensil that held the raw meat. The juices from the raw meat can be contaminated with E. coli, which can then contaminate the cooked meat.
- Serve cooked meats right away, or keep them hot, at least 60 degrees Celsius (140 Fahrenheit) or hotter, until you are ready to serve them.
- Peel any fruits and vegetables to be eaten raw, or wash them well in clean water. Avoid drinking unpasteurized milk, juice, or ciders.

Is there a treatment for the disease?

Anyone who has cramps and/or bloody diarrhea should see a doctor.

Drinking lots of clear fluids is important to replace lost fluids and prevent dehydration.

Do not take anti-diarrhea medicine unless you first talk to your doctor.

For more information about food safety, see the following BC HealthFiles:

[#03 Raw Milk: A Risk to Public Health](#)

[#22 Home Canning: How to Avoid Botulism](#)

[#59 Ten Easy Steps to Make Food Safe](#)

[#72 Unpasteurized Fruit Juices: A Potential Health Risk](#)

[#76 Foods to Avoid for People at Risk of Food-borne Illness](#)



BC Centre for Disease Control
AN AGENCY OF THE PROVINCIAL HEALTH SERVICES AUTHORITY

For more BC HealthFile topics, visit www.bchealthguide.org/healthfiles/index.stm, or visit your local public health unit.

Call the BC NurseLine to speak to a registered nurse, available 24-hours every day:

- In Greater Vancouver, call 604-215-4700
- In BC, call toll-free 1-866-215-4700
- Deaf and hearing-impaired, call 1-866-889-4700
- Pharmacist available 5pm to 9am every day
- Translation services in over 130 languages upon request.

Visit BC HealthGuide OnLine – a world of health information you can trust at www.bchealthguide.org