



E. coli Infection - Strain 0157:H7

Beef



What is E. coli?

All humans have a bacteria called E. coli in their intestines (Escherichia coli). Most E. coli bacteria are harmless. But one type, called E. coli 0157:H7, is found in cows' intestines. If this type of E. coli enters the human body, it can cause severe kidney disease and other medical problems.



Raw meat



What are the symptoms?

Symptoms include the following:

- abdominal cramping
- nausea
- vomiting
- diarrhea (often the feces contain blood)



Improperly cooked meat



Who is affected?

E. coli usually causes the most severe illness in young and old people. People without symptoms or with very mild symptoms can still pass the bacteria on to others.

In some people—especially children under 5 and the elderly—the infection can cause a complication called hemolytic uremic syndrome (HUS). In this condition, the red blood cells are destroyed and the kidneys fail, which can cause death.



Human body

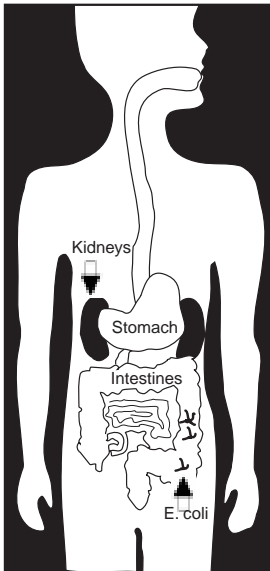
How is E. coli spread?

Cows do not become ill by having E. coli 0157:H7 in their intestines. But when the cow is killed, the bacteria can spread during the meat processing. When this meat is ground into hamburger, the bacteria can be mixed into the meat.

Meat with E. coli looks and smells like normal meat. If this meat is not cooked thoroughly, the bacteria produces a toxin (poison) in the intestine of the person who has eaten it.

E. coli can also be spread by:

- drinking unpasteurized milk
- drinking or swimming in water that contains sewage
- eating produce contaminated at the farm that has not been properly washed
- drinking contaminated, unpasteurized apple cider (not pasteurized apple juice)
- not washing hands after a person with E. coli uses the bathroom and then handles food or other objects that go into people's mouths



Toxins that damage the kidneys can cause death among the very young and elderly.

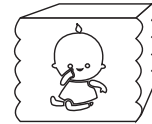
See page 2 to prevent E. coli

Food Safety

Wash hands well

Wash hands carefully after using the bathroom.
Wash hands carefully before and after handling food.

Bacteria can spread quickly among children in diapers. Family members and playmates are easily infected. Children and child-care providers must wash their hands well after using the toilet or after changing diapers, before eating, and after play activities.



How to wash hands well:



Rub both hands on the top and bottom with soap for 20 seconds.



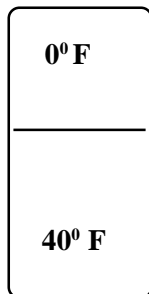
Use paper towels or clean terry cloth towels for drying.



Use the paper towel to turn off the water faucet in a public restroom.

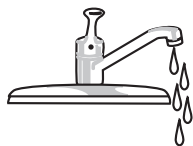
Safe food preparation

Keep it cool!

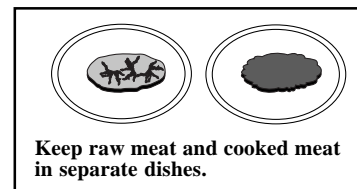


- Refrigerate/freeze meat as soon as you arrive home.
- Set your refrigerator at 40° F or below. Set your freezer at 0° F or below.
- Thaw meat only in the refrigerator or microwave.
- Place fresh meat in a container to confine juices. Store on the lowest shelf of the refrigerator.
- Do not let cooked foods stand out at room temperature for longer than 1 hour.
- Refrigerate large pots or quantities of food in smaller containers so they are quickly cooled all the way through.

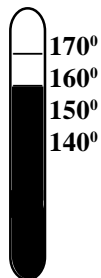
Keep it clean!



- Wash hands with soap and hot water before and after handling raw meats.
- Keep raw meats away from ready-to-eat foods.
- Use a clean container or surface to hold cooked meat.
- Wash cutting board and utensils between preparation of raw and cooked meats.



Cook it properly!



- Cook all ground beef or hamburger to a temperature of 160°F. Make sure the cooked meat is brown to the center and has no pink juices. The inside should be hot.
- Cook large pieces of meat or poultry to these internal temperatures:

Rare	140° (not advised)
Medium Rare	150° (not advised)
Medium	160°
Well Done	170°
- Reheat precooked foods to 165°
- Always use a cooking thermometer.

Heat at 160° will kill germs.
Freezing will not.

Other food tips

- Order meat well done when eating out. If you are served undercooked food, send it back for further cooking.
- Use only pasteurized milk and milk products. Avoid raw milk.

For more information, call (619) 515-6620 or check the internet at www.CDC.gov.