

# E. coli

## What is E. coli infection?

E. coli or Escherichia coli are a group of bacteria that live in the intestines of humans and animals. Most E. coli do not cause harm. Some harmful ones that come from animals, such as E. coli O157:H7, can make you very sick when they get into your mouth.

## What does E. coli come from? How is it spread?

E. coli infection is most often caused by eating food or drinking water that is contaminated with the bacteria. These foods could include beef, especially ground beef, raw and undercooked, fruits and vegetables that are not cooked, such as lettuce, fresh spinach, alfalfa and bean sprouts, unpasteurized or raw milk and raw milk products such as raw milk cheese, unpasteurized juices or cider and untreated drinking water such as surface water or well water.

Meats can become contaminated with *E. coli* when the animals are slaughtered or processed and fresh produce can become contaminated from manure, contaminated water, wildlife or poor hygiene by farm workers.

E. coli can be spread by:

- People with E. coli infection that handle or prepare food for others.
- Food handlers with unsafe food handling, poor hand washing and personal hygiene
- Infants and toddlers who are not toilet trained, to their family members, caregivers and playmates
- People who do not get sick or show symptoms, but carry the bacteria in their intestines
- People with diarrhea that contaminate their environment in homes and hospitals
- Touching animals that carry the bacteria, such as on farms and at petting zoos

E. coli is not spread by coughing, kissing or through normal, everyday interactions with neighbors or friends.

If you are employed as a food handler or a health care worker, go home or stay home if you have diarrhea. Report your symptoms to your manager.

## What are the symptoms?

Symptoms can start as early as one day or as long as ten days after contact. Symptoms usually last about one week.

Common symptoms are:

- severe stomach cramps
- diarrhea that may be bloody
- nausea and vomiting
- headache
- fever

Some people, especially young children, can get a more serious illness called Hemolytic Uremic Syndrome (HUS). This complication is a type of kidney failure and blood disorder. Most people with HUS get better within a few weeks, but some may have permanent kidney and other organ damage and may even die.

See a Health Care Provider (Doctor or Nurse Practitioner) if you think you have E. coli infection. Ask that your diarrhea be tested.

## **Am I at risk?**

Anyone can become sick from an E. coli infection. Those at greatest risk include:

- Children under 5 years of age, the elderly, and people with weakened immune systems,
- Pregnant women

## **Do I need treatment?**

Antibiotics are not recommended for E. coli O157:H7 infections. It is not recommended to take medicines to stop the diarrhea. Drink fluids, like water and juice, to stay hydrated.

## **How can I prevent E. coli infection?**

Wash your hands well:

- Before preparing food
- After using the toilet, helping others toilet, or changing diapers
- After touching animals and pets, pet food, treats and toys, and cleaning up after your pet

Foods that are contaminated with E. coli bacteria do not look or smell bad. People who have E. coli infection should not prepare food for others because they may contaminate the food and make others sick.

Follow these four simple steps to “Be Food Safe”.

### **Clean**

- Wash your hands before preparing food and often during preparation. Washing is especially important after handling raw meat, poultry, fish, seafood or raw eggs.
- Wash fruits and vegetables with clean water before cooking or eating.
- Clean and then sanitize cutting boards, utensils, and countertops after preparing raw meat, poultry, egg products and raw vegetables.
  - **Sanitize** with a mild bleach and water solution: mix 1 ml (¼ teaspoon) of unscented household bleach into 500 ml (2 cups) of water.

### **Separate**

- Keep raw meat, poultry, seafood, eggs and their juices away from other food items while shopping, during storage in the refrigerator
- When preparing food keep raw meat, poultry, seafood, eggs away from food that won't be cooked. Use separate utensils for raw and cooked foods.

### **Cook**

- Cook all meat, fish and poultry to safe temperatures. Use a food thermometer.
  - Cook whole poultry to 82°C/180°F.
  - Cook food mixtures that includes poultry, egg, meat, fish to 74°C/165°F
  - Cook poultry (other than whole poultry) and ground poultry to 74°C/165°F
  - Cook pork, pork products, ground meat that does not contain poultry to 71°C/160°F
- Keep hot foods hot above 60°C/140°F if not served right away.

## Chill

- Keep the fridge at 4°C (40°F) or below.
- Chill leftovers and takeout foods within 2 hours.
- Thaw food in the refrigerator, under cold running water or in the microwave just before cooking. Never thaw at room temperature.

## Other Considerations:

- ✓ Use only pasteurized milk and foods made from pasteurized milk.
- ✓ Use only pasteurized juice and apple cider.
  
- ✓ Drink water from a safe supply. Lakes, streams or other sources are untreated and may not be safe. Keep water out of your mouth while swimming in lakes or pools.
  
- ✓ Keep pets away from food storage and preparation areas.
  
- ✓ When you visit petting zoos or other areas with wild animals and farm animals:
  - ⇒ Obey all signs that warn not to touch the animals or that give other precautions.
  - ⇒ Wash your hands well with soap and water or use an alcohol-based hand rub after animal contact.

If you have E. coli infection, your local Public Health Unit will be in contact with you and can answer any questions you may have.

**If you have any questions or concerns, please contact the Infectious Disease Control Team at 519-663-5317 ext. 2330 or go to [www.healthunit.com](http://www.healthunit.com)**

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**Date of Creation: December 14, 2012**

**Last Modified on: August 30, 2018**