

# E. COLI

## What It Is and How to Prevent It

People died and hundreds more got sick after eating at a reputable fast-food service business. The culprits were undercooked E. coli-contaminated hamburgers. As many as 9,000 Americans die each year and millions more are sickened as a result of a foodborne illness such as E. coli.

E. coli is the abbreviated name of the bacterium *Escherichia coli*. The rare strain of E. coli that is dangerous is E. coli O157:H7. This strain produces toxins that cause severe damage to the cells that line the wall of the intestine. Not only do we lose water and salts, but blood vessels are damaged and severe bleeding occurs. In some cases, the bacterium causes hemolytic uremic syndrome (HUS), which results in bleeding and kidney failure.

### Prevention

E. coli is most commonly found in undercooked contaminated ground beef, although it can also be transmitted through water, raw milk, a person infected with the bacteria, or unpasteurized apple juice or cider. Fortunately, there are ways you can prevent foodborne illnesses such as E. coli.

### Correct Cooking

Cooking at the correct temperatures kills the E. coli bacteria.

- ◆ Cook food to an internal temperature of 160° F (145° F for roasts, steaks and chops of beef, veal and lamb) as measured by a meat thermometer.
- ◆ Reheat cooked food to to an internal temperature of 165° F.
- ◆ Avoid relying on the color of meat or its juices to determine whether it's done. Some ground meat browns before it's reached a safe internal temperature.

### Storage Temperature

Bacteria like E. coli multiply rapidly between 40° F and 140 °F. To keep food out of this "danger zone," keep cold food cold and hot food hot.

- ◆ Store food in the refrigerator (40° F or below) or freezer (0° F or below).
- ◆ Maintain hot cooked food at an internal temperature of 140° F.

### Prevent Cross-Contamination

- ◆ Practice good personal hygiene; wash hands frequently.
- ◆ Keep raw foods and juices separate from other foods.
- ◆ Wash hands and sanitize equipment and surfaces before and after contact with raw food.

### Symptoms

E. coli symptoms surface two to five days after contaminated food is eaten and can last up to eight days. They include:

- ◆ diarrhea.
- ◆ abdominal cramps.
- ◆ occasionally, a low-grade fever.
- ◆ nausea.
- ◆ vomiting.

### High Risk

Age and physical condition place some people at higher risk of serious illness than others. Infants, pregnant women, the elderly and people with compromised immune systems are at greatest risk from bacteria. Some people may become ill after ingesting only a few bacteria; others may remain symptom-free after ingesting thousands.

### What to Do

If you think someone may have been contaminated with E. coli, tell your supervisor. Make sure the person receives medical attention if symptoms are severe, and tightly wrap, label and refrigerate food that may have caused the sickness.