

E. coli Fact Sheet

What is *E. coli*?

Foodborne illness can be caused when contaminated water or food is eaten. *Escherichia coli* (abbreviated as *E. coli*) are bacteria that can contaminate food and water. Although some strains of *E. coli* are harmless, others can make you sick. One group of *E. coli* causes illness by making a poison called Shiga toxin (Shiga toxin-producing *E. coli* (STEC)). You may be familiar with one Shiga toxin-producing strain, *E. coli* O157:H7, which is often mentioned in news reports about outbreaks of *E. coli* infections.

What are the symptoms of *E. coli* infection?

Symptoms of *E. coli* infection usually begin 3 to 4 days after exposure, but the time may range from 1 to 9 days. Symptoms may include mild to severe stomach cramps, diarrhea which is often bloody (hemorrhagic colitis), vomiting, and sometimes fever. Most people get better within 2 to 9 days, but others may develop a potentially life-threatening complication known as hemolytic uremic syndrome (HUS). In HUS, damaged red blood cells clog the kidneys and can lead to kidney failure. Most people with HUS recover within a few weeks, but some may suffer permanent kidney damage or death. HUS can occur in people of any age, but is most common in children under 5 years old and the elderly.

How is *E. coli* spread?

The types of *E. coli* that cause foodborne illness can be spread through contaminated water or food, or through contact with infected animals or people. Methods of contamination can include:

- eating food directly contaminated by stool from infected people or animals,
- eating food prepared or served by an infected person who does not practice good personal hygiene,
- touching cattle or other infected animals such as in petting zoos and animal exhibits, and
- using, drinking, swimming in, or playing in untreated or sewage-contaminated water.

Some foods frequently contaminated by *E. coli* include:

- undercooked ground beef,
- unpasteurized (raw) milk and soft cheeses made from raw milk,
- unpasteurized juice, and
- raw produce (like spinach, sprouts, and lettuce) contaminated by animals, unclean irrigation water, and raw meat juices.

Why is *E. coli* important for child nutrition professionals?

People working with food who are sick with *E. coli* can easily make others ill. A sick child nutrition employee can contaminate the food he or she is handling. Those eating the contaminated food may become ill. People infected with *E. coli* are typically contagious for at least 1 week. Some people may be contagious for as long as 3 weeks. It is important for people to always use good handwashing and other hygienic practices, especially after they have recently recovered from *E. coli* illness.

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How can *E. coli* be prevented?

- Wash your hands thoroughly after using the restroom or changing diapers and before preparing or eating food.
- Wash your hands after contact with animals or their environments (at farms, petting zoos, fairs, even your own yard).
- Avoid bare hand contact with ready-to-eat and ready-to-serve foods.
- Report symptoms of diarrhea and vomiting, diagnosis of *E. coli*, or exposure within the past 3 days to others with *E. coli* to your manager and/or director. Do not work when you have these symptoms.
- Cook meats thoroughly. It is important to use a thermometer, as color is not a very reliable indicator of proper temperature.
- Purchase and serve only pasteurized dairy products and pasteurized juices.
- Store foods properly keeping raw meat and poultry separated from ready-to-eat foods. Always store raw meat and poultry in the bottom shelf.
- Keep raw meat and poultry separate from food that will not be cooked to the same temperature, and ready-to-eat foods.
- Wash raw fruits and vegetables under clean, running water. Ensure produce is purchased from reliable sources.
- Prevent cross contamination in food preparation areas by thoroughly washing, rinsing, and sanitizing all food contact surfaces, especially after preparing raw meat.

This fact sheet is part of a series of six fact sheets on foodborne illness control and prevention.

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