



Atlantic County

Division of Public Health

Frequently Asked Questions about Escherichia coli 0157:H7

What is Escherichia coli 0157:H7?

Escherichia coli (E. coli) are bacteria that normally live in the intestines of healthy people and animals, primarily cattle. Most strains of this bacteria are harmless. E. coli 0157:H7 is a specific strain of E. coli that causes illness. It was first recognized as a cause of illness during an outbreak of hemorrhagic colitis (severe bloody diarrhea) in 1982. The cause of that outbreak was traced to hamburgers contaminated with E. coli 0157:H7 bacteria.

Who gets E. coli 0157:H7 infection?

Anyone can become infected with E. coli 0157:H7. The elderly and children under 5 years of age are at greatest risk of developing a serious illness from E. coli 0157:H7 infection.

How is E. coli 0157:H7 infection spread?

A person becomes infected with E. coli 0157:H7 by swallowing the bacteria. This can occur when an individual eats food which has become contaminated with E. coli 0157:H7, most frequently undercooked ground beef and raw milk. Transmission also can occur directly from person-to-person in families, child care centers and custodial institutions. Outbreaks have also been traced to contaminated water.

What are the symptoms of E. coli 0157:H7 infection?

The symptoms of E. coli 0157:H7 infection are variable. Some individuals have no symptoms (asymptomatic). Others may have mild to severe diarrhea, which may contain blood. Abdominal cramps, nausea and vomiting may occur. Usually there is little or no fever present. A small number of patients develop complications, such as hemolytic-uremic syndrome (HUS). Death due to E. coli 0157:H7 infection occurs infrequently, usually as a result of a complication of the infection.

What is hemolytic-uremic syndrome (HUS)?

HUS is an infrequent and serious complication of E. coli infection, particularly in children under 5 years old. It is characterized by renal failure, or loss of kidney function. Many patients also develop anemia or a bleeding problem. Hospitalization and dialysis is usually necessary until kidney function recovers. Many patients have some permanent partial loss of kidney function after they have recovered.

How soon do symptoms of E. coli 0157:H7 infection develop?

Symptoms of illness usually appear about 3 days after swallowing the bacteria but can range from 1 to 8 days.

How is E. coli 0157:H7 infection diagnosed?

An infection with E. coli 0157:H7 is diagnosed by testing the patient's stool for E. coli 0157:H7 bacteria. This is a special laboratory test that your doctor must order if he or she feels you have E. coli 0157:H7.

What is the treatment for E. coli 0157:H7 infection?

Most individuals who become ill with E. coli 0157:H7 infection recover on their own within a week. Some however may require hospitalization to administer intravenous

(IV) fluids to prevent dehydration. Antibiotics may be prescribed by a physician to treat severe cases of illness.

How long is an infected person infectious to others?

An infected person can spread E. coli 0157:H7 infection to others as long as the E. coli bacteria are being passed in his/her stool. This usually lasts no longer than one week, but it can last as long as 3 weeks in one third of children.

Should an infected person be excluded from work or school?

Most infected persons may return to work or school when they no longer have diarrhea and fever. Since the E. coli 0157:H7 bacteria may continue to be passed in their stool for several weeks, they **MUST** remember to carefully wash their hands with soap and water after **EVERY** bathroom visit.

Special precautions are indicated for food handlers, health care workers, and child care providers and attendees. These individuals may put multiple other people at risk of contracting this illness. Food handlers, such as cooks and others who prepare or touch food, are excluded from food handling until they no longer have symptoms and they have at least 2 negative stool tests. Health care workers should be excluded from direct patient care until they no longer have symptoms, and where practical, they should have 2 negative stool tests before resuming regular duties. In child care settings, if E. coli 0157:H7 is identified in either a staff member or a child attendee, stools of all staff, attendees, and household contacts with diarrhea should be tested even if these people have no symptoms. The local health department should be advised of these circumstances, and their staff will be glad to provide further individualized advice to help eliminate the problem.

How can E. coli 0157:H7 infection be prevented?

- Cook ground beef or hamburger thoroughly. Make certain the cooked meat is gray or brown color throughout (not pink) and the meat juices run clear; the inside should be hot.
- Eat and drink only pasteurized milk and milk products (for example, cheese).
Do not drink unpasteurized apple cider and untreated water.
- Wash hands thoroughly with soap and warm water before preparing food, before eating, and before feeding children.
- Carefully wash hands after changing diapers and using the toilet.
- Anyone who has diarrhea should not use a pool or swim in a pond.

Where can I get more information?

- Your health care provider
- Your local health department
- The NJ Department of Health : <http://www.nj.gov/health/cd/ecoli/index.shtml>
- CDC website: <https://www.cdc.gov/ecoli/index.html>