

Facts about E.coli 0157:H7

What is E.coli? E. coli O157:H7 is one of hundreds of strains of the bacterium Escherichia coli. Most strains are harmless and live in the intestines of healthy humans and animals. This strain produces a powerful toxin and can cause severe illness.

Spread through contact with

- Water and food contaminated by E.coli: ground beef, sprouts, lettuce, unpasteurized milk and juice.
- **Diarrhea** from an infected person. Young toddlers with E.coli can spread the infection easily in child care and at home. **Reminder:** Diarrhea is an increase in the number of stools (bowel movements) over what is considered normal for that person AND stools that are unformed – loose, watery, and take the shape of the container they are in (do not have distinct form).

Incubation period

- Symptoms usually appear 3-4 days after exposure. Symptoms may appear in 2-8 days.

Contagious period

- From the initial period of diarrhea and up to 2-3 weeks after symptoms are gone.

Symptoms

- Diarrhea or bloody diarrhea
- Abdominal cramps
- Usually no fever

Potential serious complications for young children with E.coli infection:

- Hemolytic uremic syndrome (HUS) destroys red blood cells and may result in sudden, short-term kidney failure. Blood transfusions and several dialysis sessions may be needed. Most children recover.

Diagnosis:

- A culture is used to detect E.coli bacterium in a stool (bowel movement) sample.

Treatment and Recovery:

- Most recover in 5-10 days without antibiotics. Antibiotics may precipitate kidney complications.
- Anti-diarrheal medications such as Imodium should be avoided.
- For people with HUS, hospitalization is usually required for treatment.

Preventing the Spread of E.coli

- Store raw meat separate from ready-to-eat-food.
- Cook raw food, especially ground beef, thoroughly.
- Drink pasteurized milk and juice.
- **Wash hands** after toileting or diapering and before eating.

Issues in Child Care

- Children and staff with symptoms and those with positive stool cultures must be excluded.
- All hygiene and sanitation procedures should be carefully followed. **Wash hands. Keep diapers and clothes soiled with stool separate and out of children's reach.**
- Upon entering a child care facility everyone should wash their hands.
- Food preparation guidelines for hygiene and sanitation should be carefully followed.
- E.coli is a reportable communicable disease. It takes the cooperation of the facility, families, communities and the local health department to control an outbreak of E.coli.

References:

E.coli, Shiga Toxin-Producing Infection. NC Communicable Disease Control Manual

www.epi.state.nc.us/epi/gcdc/manual/NCEcoli.pdf

Escherichia coli 0157:H7. CDC, Division of Bacterial and Mycotic Diseases

www.cdc.gov/ncidod/dbmd/diseaseinfo/escherichiacoli_g.htm#What%20is%20Escherichia%20coli%200157:H7