

BETRAYED

E. COLI FACT SHEET

E. COLI – DEFINITION*:

Enterohemorrhagic *E. coli* is one of several intestinal types of *E. coli* that infect animals and humans. The O157:H7 strain is often the result of toxins and/or bacterial invasion into the intestine. The bacteria is bred and colonizes in the intestines of cattle and is spread to human beings through exposure to contaminated water and food sources. Marked by symptoms of diarrhea, stomach cramping and general malaise, the incubation period is 24 to 72 hours. In adults, the infection is usually not severe, but in infants, children and the elderly, the infection frequently requires hospitalization, and in some cases is life-threatening.

**Gale Encyclopedia of Medicine and The E.Coli Index*

E. COLI – THE ORIGINS:

How it's spread to us:

1. Humans may contract the bacteria through digestion of contaminated food or water sources from liquid fertilizer, which is produced from cattle manure and is used in cultivating fruits and vegetables.
2. When cattle are forced to stand and lie in their own manure in stockyards and slaughterhouses, the bacteria is spread to the flesh during the slaughtering process.
3. Humans may contract the bacteria from unwashed fruits and vegetables that have inadvertently come into contact with the bacteria through other means besides fertilizer.
4. When municipal and industrial sludge are used to fertilize farmers' fields, the contents may contain disease-causing pathogens, toxic chemicals from industrial wastes, household chemicals and pesticides.

E. COLI – THE EFFECTS:

- Bloody diarrhea, stomach cramping, dehydration
- *E. coli* causes HUS – a form of kidney disease called *Hemolytic Uremic Syndrome*. This leads to anemia, blindness, strokes, brain damage and a life on a dialysis machine.
- Over 90% of cases involving kidney disease in children has been linked to *e.coli*.
- Other internal organs can fail.
- Those who don't die are often affected for life by kidney disease, and other health problems.

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WHY E. COLI IS SUDDENLY PREVALENT:

Until recently, health professionals and epidemiologists had not made the connection between E.coli O157:H7 and Hemolytic Uremic Syndrome. Once they made the connection, they started testing for O157 when they saw HUS cases.

E.coli O157:H7 is an organism that evolves quickly, so the present strain may be relatively new – although there's no way of knowing for certain. The bacteria's predecessors may not have been quite as virulent and therefore would have been difficult to identify, as many victims would just assume they had simply contracted the flu and wouldn't visit a doctor.

Due to the changes in food distribution worldwide over the last 25 years, it creates opportunities for a greater number of people to be affected by a single outbreak.

E. COLI O157:H7 OUTBREAKS:

SCOTLAND, 1996	21 deaths, contracted from beef
JAPAN, 1996	11 deaths, thousands sick, contracted from radish sprouts
WALKERTON, 2000	7 deaths, 2500 sick, contracted from water
NORTHWEST US, 1993	4 died, hundreds sick contracted from beef
MISSOURI, 1990	4 deaths, contracted from water

DOCUMENTED SOURCES OF E. COLI OUTBREAKS:

Drinking water, watermelon, lettuce, apple cider, beef, gravy, unpasteurized milk, sand and molding clay, swimming pool water, alfalfa sprouts and radish sprouts.

CRYPTOSPORIDIUM OUTBREAKS:

E-coli O157:H7 isn't the only organism causing problems with drinking water. Among several others: Cryptosporidium.

MILWAUKEE, 1993	110 deaths
KITCHENER-WATERLOO, 1993	200 people became ill
KELOWNA, 1996	10-15,000 people became ill
CRANBROOK, 1996	2,000 people became ill
NORTH BATTLEFORD, 2001	hundreds became ill