



# Whatcom County Health Department

## FACT SHEET: *E. coli* O157:H7

### What is *E. coli*?

*E. coli* are bacteria that normally live in the intestines of humans and animals. Many strains are harmless but several are known to produce toxins that can cause diarrhea. One particular *E. coli* strain called O157:H7 can cause severe diarrhea and kidney damage.

### Who gets *E. coli* O157:H7 infection?

- Anyone can become infected with *E. coli* O157:H7, but the very young and the elderly are more likely to develop serious complications.

### How is it spread?

- *E. coli* O157:H7 can be acquired by eating contaminated food. The bacteria live in the intestines of animals. Contamination of meat may occur during the slaughtering process. Deer meat (venison) may also be infected with the organism.
- Eating ground beef that is inadequately cooked is a common way of getting the infection.
- Fresh vegetables, unpasteurized fruit juices and raw milk have also caused outbreaks. With careless food handling any food product eaten raw can be contaminated by raw meat juices.
- Person-to-person transmission, especially in child care settings, can occur if infected people do not wash their hands after using the toilet or diapering children.
- Drinking contaminated water may also cause infection.
- Exposures can also occur from contact with farm animals.

### What are the symptoms?

- Some infected people have mild diarrhea or no symptoms at all.
- Most identified cases develop severe diarrhea and abdominal cramps.

- Blood is often seen in the stool.
- Usually little or no fever is present.
- Symptoms generally appear three to four days after exposure, but can take as long as nine days to appear.
- Persons experiencing these symptoms should contact their physician.

### How is *E. coli* O157:H7 infection diagnosed?

- Infection with *E. coli* can only be diagnosed by a special stool culture.
- Public health authorities advise doctors and laboratories to consider performing a special stool culture test for *E. coli* O157:H7, particularly in people with bloody or severe diarrhea.

### What is the treatment?

- Symptoms generally go away without antibiotics or other specific treatment in five to ten days in adults but may last up to three weeks in children.
- Studies suggest antibiotics are harmful in the treatment of *E. coli* O157:H7 infection.
- It is recommended that antibiotics and antidiarrhea medicines not be given.

### What serious complications can result from *E. coli* O157:H7 infection?

- In some people, particularly children under five years of age, the infection can cause a complication called hemolytic uremic syndrome (HUS). This is a serious disease in which red blood cells are destroyed and the kidneys fail.
- Transfusions of blood or blood clotting factors, as well as kidney dialysis, may be necessary. A prolonged hospital stay is often required.
- Fortunately, most people with HUS recover completely, but it can be fatal.





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#### **What can I do to prevent infection?**

- Do not eat undercooked ground beef products. Make sure ground beef is brown throughout (not pink) and the juices run clear.
- Drink only pasteurized milk, milk products and fruit juices.
- Carefully wash all produce, kitchen utensils and countertops.
- Wash hands carefully with soap after using the toilet, changing a child's diaper, or touching farm animals to reduce the risk of spreading disease.
- Wash hands with hot, soapy water, rubbing hands together for 20 seconds.
- Persons ill with diarrhea or children in diapers should not swim in pools or lakes.

#### **Outbreaks**

The largest Washington State *E. coli* O157:H7 outbreak was in 1993, when 477 people were infected from undercooked hamburger. Additional outbreaks have occurred in the United States from non-beef sources including lettuce and salad bars, unpasteurized apple cider, homemade venison jerky, contaminated swimming water, and petting farms.

