



2. Toilet and Hygiene Practices

Always wash your hands in warm soapy water:

- before and after preparing food
- after handling raw meat
- after going to the toilet
- after changing nappies
- after any direct contact with animals or animal faeces.

If you are caring for small children or those with poor personal hygiene, make sure their hands are washed in warm soapy water after they use the toilet or have direct contact with animals.

3. Keeping those Infected at Home and Seeking Medical Help

If you suspect you or anyone in your care has become infected with *E. coli* O157:

- Contact your GP immediately
- Make sure the patient drinks plenty of liquids to avoid dehydration as a result of diarrhoea
- Pay particular attention to personal hygiene, especially hand washing, to avoid person-to-person spread
- Keep children and others who attend day-care centres at home until the infection has cleared
- Seek further advice from your local Health Service Executive area.*

* Formerly known as the health board

What are the Symptoms?

1. **Non-bloody diarrhoea.** The patient may have a mild to severe form of gastroenteritis. Since this is difficult to distinguish *E. coli* O157 infection from other forms of gastroenteritis, care should be taken with hand washing, particularly after nappy/napkin changing.

2. **Severe cramps followed by bloody diarrhoea** (haemorrhagic colitis) appear on the second or third day of illness. Consultation with a doctor is absolutely necessary and a stool sample should be taken. Patients may need to be hospitalised.

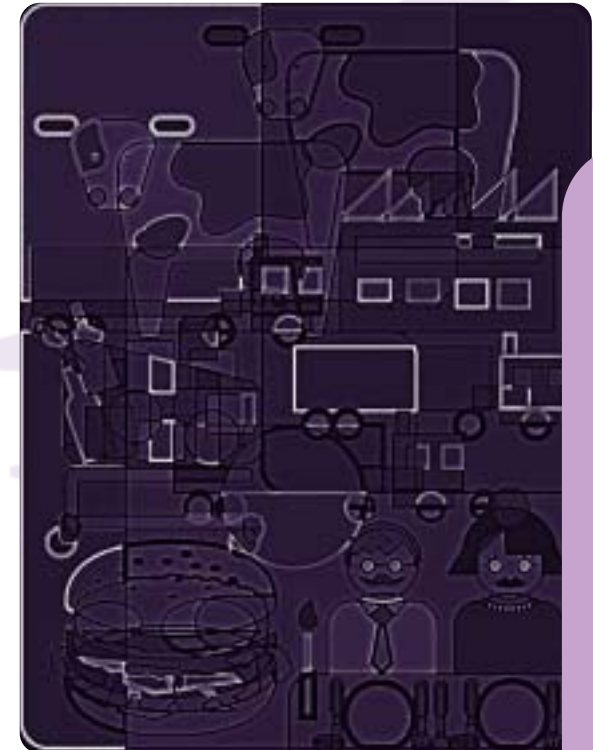
3. **Kidney disease or failure** (Haemolytic Uraemia Syndrome – HUS) can affect up to 30% of people infected with *E. coli* O157. About 50% of these patients need dialysis and 3-5% die. Children under 10 are most susceptible to HUS.

Leaflets in the *E. coli* O157 series available from the Food Safety Authority of Ireland include: Reducing the Risk on the Farm; Preventing the Spread of Infection in the Abattoir; Preventing the Spread of Infection in the Food Factory; Preventing the Spread of Infection in Catering and Retailing; Protecting Yourself and Your Family; Protecting Vulnerable Groups.

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Up to 30% of people infected with *E. coli* O157 can develop kidney failure and 3-5% of these people die

***E. coli* O157 Can Kill**

Escherichia coli (*E. coli*) is the name given to a large family of bacteria commonly found in the gut of humans and animals. The majority of *E. coli* are harmless however, some types can cause illness. One particular type, known as *E. coli* O157 causes serious illness in humans, ranging from diarrhoea to kidney failure and even death.

Human infection has been increasing worldwide since the early 1980s. In 1996 Scotland had a large outbreak that affected over 500 people and 21 people died. Here in Ireland, the number of reported cases is on average, 50 per year.

Low Infectious Dose

Normally, it takes hundreds if not thousands of germs to make someone ill. Unfortunately, with *E. coli* O157 the number required may be as little as 10. So even a small number of germs can cause serious illness, particularly in the young, the elderly and those already suffering from other diseases.

E. coli O157 is commonly found in the gut of healthy livestock and it can be shed in their faeces. It may also be present in unchlorinated water supplies or in contaminated ready-to-eat food. *E. coli* O157 can be passed from person-to-person.

This makes it so important to pay attention to food safety and hygiene at all stages of food production and preparation if foodborne illness is to be prevented.

Shared Responsibility

Because of the seriousness of the disease, steps must be taken to reduce the risks of *E. coli* O157 infection throughout the food chain: from farm to fork.

Farmers, processors, distributors, retailers, caterers and consumers all have their part to play. They share the responsibility to minimise the risks.

How Do You Catch *E. coli* O157 Infection?

People can become infected with *E. coli* O157 by:

- Coming into direct contact with livestock or animal faeces
- Drinking contaminated water
- Eating contaminated food
- Coming into contact with the faeces of an infected person.

Who Are the Most Vulnerable Groups?

Those most susceptible to infection are:

- Infants and children under five
- Frail elderly people
- People suffering from chronic diseases or with depressed immune systems.

Groups at risk of spreading the infection include:

- People working in close contact with livestock or raw meat
- Those working or living in close contact with infected people – particularly in hospitals, institutions, residential and day-care centres, crèches and pre-schools

- People with physical disabilities or learning difficulties who are incontinent or unable to maintain good personal hygiene.

Three crucial areas to prevent the spread of *E. coli* O157 infection in your home:

1. Choice, storage and preparation of food
2. Toilet and hygiene practices
3. Keeping those infected at home and seeking medical help.

1. Choice, Storage and Preparation of Food

What to look for when you are shopping:

- Are raw meats stored separately from other foods? Never buy ready-to-eat foods that are displayed alongside raw meats
- Are food utensils for raw meat separate from those used for other foods?
- Are serving staff operating in an hygienic environment? Staff should wear protective clothing and those handling raw meat should not handle other foods without changing gloves or washing hands
- Is chilled food cold and frozen food still frozen?

What to do at home

Avoiding cross contamination in the kitchen is crucial to reducing the risk of *E. coli* infection:

- Store raw meats separately on the bottom shelf of the fridge and keep raw meat refrigerated at <5°C or frozen

Adequate **cooking** kills this germ

- Never let raw meat, or its juices, come into contact with cooked meat or any other food that will be eaten without further cooking
- Use separate chopping boards and utensils for raw meat, cooked meat, vegetables and fruit, and other ready-to-eat foods
- Defrost food properly: overnight in the fridge
- If you do defrost food in the microwave, cook the food immediately
- Wash all vegetables and fruit in drinking (chlorinated) water
- If not on a mains water supply (chlorinated), get water quality checked on a regular basis.

Cook food adequately:

- Cook beef burgers, minced, diced or rolled meat well. Cook until juices run clear or until the thickest part of the meat has reached 75°C
- Use a temperature probe where possible
- Follow microwave manufacturers' cooking instructions
- Follow manufacturers' cooking instructions on convenience food.

If you are caring for anyone in the vulnerable group category:

- Avoid serving unpasteurised milk, cream or milk products such as cheese and yoghurt
- Avoid serving rare or undercooked meat.