

E. coli O157 Infection - Factsheet

What is E. coli O157 infection? How is it caught?

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

The commonest sources are eating contaminated foods, direct contact with infected animals or other people with the illness and drinking unpasteurised milk. The illness is easily passed from person to person as only a few germs are needed to make someone ill.

What are the symptoms of E. coli O157 and how is it treated?

E. coli O157 infection usually causes severe bloody diarrhoea and abdominal cramps. Some people don't have blood in their diarrhoea and some have no symptoms at all. There's usually little or no temperature and the illness is over in 5 to 10 days. Most people recover without antibiotics or other treatment within 5 to 10 days. There's no evidence that antibiotics help and their use can cause kidney problems. Anti-diarrhoeal agents should be avoided.

Are there any longer term complications of E. coli O157 infection?

In some, particularly children under 5 and the elderly, the infection can cause haemolytic uraemic syndrome (HUS) where the red blood cells are destroyed and the kidneys fail. 2 to 7% of infections lead to this complication which is life threatening and is usually treated in intensive care, often requiring blood transfusions and kidney dialysis. The death rate as a result of HUS is 3 – 5%.

What can I do to prevent E. coli O157?

There's no vaccine against E. coli O157 nor do you become immune to it, so it's important to avoid infection as far as possible. You should:

- Thoroughly cook ground beef and hamburgers (cows are the commonest carrier of the infection).
- Keep raw meat separate from ready-to-eat foods,
- Wash hands, work surfaces and utensils with hot soapy water after touching raw meat,
- Consume only pasteurised products such as milk, juice and cheese,
- Wash fruits and vegetables thoroughly, especially those that won't be cooked,
- Avoid swallowing water while swimming,
- Make sure those with diarrhoea, especially children, wash their hands carefully with soap after bowel movements to reduce the risk of spreading infection,
- Wash hands after handling animals or visiting farms.

What happens after I find out I have the infection?

It's important to prevent the spread from person to person. There are certain occupations where the risk is greater or the consequences are more serious. The following groups are nationally recognised as high risk:

- Group A – Any person of doubtful hygiene or with unsatisfactory toilet, hand washing or hand drying facilities at home, work or school,

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- Group B – Children attending pre-school groups or nursery,
- Group C – People whose work involves preparing/serving unwrapped foods not subjected to further heating,
- Group D – Health and social care staff.

If you/your child are not in any of these groups, you'll be advised by the Environmental Health Practitioner (EHP) that you can return to work after being symptom free for 48 hours. Children over 5 years of age may need to provide a negative sample before returning to school.

What happens if I am in a risk group?

If you/your child are in one of the above risk groups you will have to stay off work/nursery/school until you've had 2 consecutive faeces (poo) samples (at least 48 hours apart) which test negative for E. coli O157. This will be arranged by the EHP/Anglia Health Protection Team.

You'll be asked questions to find out how you might have caught the infection. We may take samples from other people in your household, especially if they're in one of the risk groups or ill or at primary school. The results will be shared with you by your GP, EHP or Anglia Health Protection Team.

What precautions should I take in the home and what should I avoid doing?

Hand washing is very important - all household members should wash hands with warm water and soap:

- After using or cleaning the toilet,
- After attending to another ill person,
- After changing a baby's nappy,
- After handling/washing soiled clothes or linen,
- Before eating or preparing food.

Other precautions are to:

- Supervise young children when washing their hands,
- Have separate towels for each family member,
- Clean toilet seats and flush handles regularly with hot soapy water.

Where possible, avoid:

- Preparing food for others whilst you have symptoms,
- Visiting others or having visitors until your symptoms have stopped,
- Young children should avoid playing with other children whilst they remain positive,
- If your child's symptoms have stopped they can go out but avoid public toilets until they have had clear samples,
- Avoid taking your child to gatherings of children such as parties until they've had clear samples,
- Avoid swimming whilst ill and for 2 weeks after symptoms have stopped.