

Health matters:

what you need to know

E. coli

Introduction

E. coli are common, harmless bacteria found in the human large intestine and also in animals. However, VTEC is a particular strain of *E. coli* bacteria not normally found in humans and it can cause serious disease.

What is VTEC?

VTEC stands for Vero cytotoxin producing *Escherichia coli*. There are a number of strains of VTEC, of which O157 is the most common in the UK. VTEC causes a range of symptoms from mild diarrhoea to severe abdominal pain and bloody diarrhoea. In some cases, it may not even cause any symptoms. A small proportion of patients may develop haemolytic uraemic syndrome (HUS), which is a serious life-threatening condition resulting in kidney failure. *E. coli* O157 causes about 50–60 infections a year here.

How do you become infected with VTEC?

People can become infected by:

- eating contaminated food (see [How do I avoid being infected?](#));
- contact with infected animals (eg at farms, petting farms and campsites);
- contact with other people who have the illness (ie through inadequate hand hygiene after using the toilet and/or before food handling – particularly in households, nurseries and primary schools);
- drinking water from inadequately treated water supplies, eg wells or springs;
- swimming or playing in contaminated water such as ponds or streams.

How do I avoid being infected?

- Cook all minced meat products (ie burgers, meatloaf, meat balls etc) thoroughly.
- Ensure that refrigerators are working correctly.
- Only leave cooked foods, meat and dairy products out at room temperature for a short time.
- Avoid all contact between raw and cooked meats.
- Thoroughly wash all salad vegetables that will be eaten raw.
- Children and the elderly, who are particularly susceptible to the severe effects of VTEC, should avoid **unpasteurised** dairy products.
- Boil any drinking water if you are unsure of its source.
- Do not swim in water that may be contaminated by cattle and sheep.
- [Wash your hands](#) thoroughly after using the toilet (or helping others, including changing nappies), handling raw meat, before meals and after contact with animals.

Further information can be found on the Food Standards Agency website www.food.gov.uk

What do I do if I get bloody diarrhoea or VTEC?

Bloody diarrhoea can be caused by a number of things, including infections other than VTEC. If you or your child develops bloody diarrhoea, you should consult your GP as soon as possible for a medical assessment. It is very important to supply a faecal sample so the infection can be promptly diagnosed.

VTEC is very infectious because so few bacteria are needed to cause illness. It can spread easily within families and in day nurseries, primary schools and nursing homes, therefore you should follow these guidelines:

- Make sure anyone affected washes their hands frequently and thoroughly, especially after using the toilet.
- Anyone with diarrhoea should not go to work, school or nursery until at least 48 hours after full recovery.
- People who have been ill should not prepare food for others until at least 48 hours after full recovery.
- Clean toilet seats, toilet bowls, flush handles, taps, hand basins, and any other areas that might have been soiled, with detergent and hot water, rinsing with household disinfectant.
- Wash all dirty clothes, bedding and towels in the washing machine on the hottest cycle possible.

Most people rid themselves of the bacteria after about one week, though children may carry it for longer periods. A small number of patients may develop HUS, which can cause anaemia, kidney failure and bleeding. Symptoms of HUS can include weakness, lethargy, sleepiness, paleness, irritability and small unexplained bruises. HUS develops between 2–14 days (average 6) after the onset of diarrhoea. HUS is more common in children with *E. coli* O157 but adults may also be affected. If you are concerned about any of these symptoms, consult your GP urgently.

How is the infection treated?

There is no specific treatment for VTEC infection, and antibiotics may make HUS more likely. It is important to drink plenty of fluids as diarrhoea can lead to dehydration. A simple painkiller like paracetamol can help combat any pain. If complications develop, patients need to be admitted to hospital.

What happens if I am (or my child is) diagnosed with VTEC infection?

The Public Health Agency (PHA) will be notified by the local laboratory and someone from the PHA or the Environmental Health team in your area will contact you. You will be asked several questions about foods you have eaten, places you have been and activities you have undertaken. Your answers may help prevent other people from being infected. You will be asked not to go to work/school/nursery and members of your household may be checked for infection.