

VTEC disease

Verotoxigenic Escherichia coli

What is it?

VTEC is a communicable disease. There are 6 major types of the bacterium *Escherichia coli* that live in the guts of people and animals and can cause diarrhoea. The most common is called VTEC (Verotoxigenic *Escherichia coli*). Most strains of *E. coli* are harmless but VTEC can make people very sick. When a person is infected with VTEC they pass out the bacteria in their poo. *E. coli* 0157 is the most important type of VTEC.

How common is VTEC?

It is relatively uncommon in New Zealand. In the last few years it has been the cause of outbreaks overseas that have affected large numbers of people. Smaller outbreaks have occurred in New Zealand.

How do you know if you have it?

It usually takes 3 to 4 days (sometimes up to 10) for symptoms to show after you have been infected. The symptoms are severe stomach cramps and watery diarrhoea that can develop into bloody diarrhoea. Sometimes people also have a fever and vomit.

Some people who are infected with VTEC do not have any symptoms but they are still passing out the bacteria in their faeces (poo).

Laboratory tests on a faecal (poo) specimen will confirm if a person has a VTEC infection. The tests can be arranged by a doctor.

How serious is it?

In most people the symptoms are very unpleasant but do not cause a severe or long lasting illness. People usually fully recover in a week. A few people who get VTEC can develop anaemia, blood clotting and kidney problems. These problems can be serious and may even be life threatening, and can cause ongoing health problems.

How long is someone infectious?

A person is infectious as long as the VTEC bacteria is in their system. This varies from person to person but can be about 1 week or less in adults, however it can be longer in children (2 weeks in 1/3 of children).

How do you get *E. coli* 0157?

- From swallowing contaminated food, or water, or sucking contaminated objects (such as toys). Food or objects can be contaminated by someone who does not wash their hands after changing the nappy of an infected child, or when a person who is infected does not wash their hands after going to the toilet.
- From eating contaminated meat (especially minced meat) and hamburgers that have not been cooked sufficiently.
- From handling raw meat.
- From drinking unpasteurised (raw) milk.
- From drinking water from rivers, streams, shallow wells or roof rain water that has been contaminated by animals or infected people.
- From eating raw fruit and vegetables that have been contaminated by human or animal sewage.

Is there any treatment?

The doctor may prescribe medication to reduce symptoms and sometimes antibiotics will also be prescribed. It is very important to drink lots of fluids when you have diarrhoea. This is especially important for children who are more likely to get dehydrated than adults.

Hospitalisation may be necessary in some cases if the illness becomes severe.

What about staying away from work, school or early childhood centres?

High risk group:

This includes food handlers, early childhood workers, health care workers in high risk occupations and children attending early childhood centres (including kindergartens, play centres, kohanga reo and Pacific Island language nests).

Cases (those with VTEC).

- Cases who are in the high risk group must not return to work or to early childhood centres until they have given 2 negative faecal (poo) specimens at least 2 days apart.

- Contacts who are in the high risk group and **have symptoms** must not return until they have given 2 negative faecal (poo) specimens at least 2 days apart.
- Contacts who are in the high risk group and **do not have symptoms** can return but must give 1 faecal (poo) specimen to check that they are not carrying VTEC.

Not a high risk group:

- Cases and contacts must not go back to work or school until they have been free of diarrhoea for 2 days. If they had diarrhoea it is recommended that they give 1 faecal specimen to check that they are clear.

REMEMBER:

- **Always wash and dry your hands frequently and thoroughly**, especially after going to the toilet, changing a child's nappy, and before and after preparing food.
- Always thoroughly cook meat, especially minced meat.
- Keep raw meat separate from cooked foods during storage and preparation.
- Wash chopping boards and utensils thoroughly after preparing raw meat.
- Don't drink unpasteurised (raw) milk.
- Wash all raw fruit and vegetables thoroughly before eating.
- Always treat or boil drinking water from rivers, streams, shallow wells or the roof. Contact Regional Public Health or your local council if you need more information.
- Don't go swimming in a pool if you have diarrhoea.

For further information contact
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