

E. coli (STEC)

Information Sheet

What is it?

Escherichia coli (*E. coli*) germs normally live in the intestines of people and animals. Most *E. coli* are harmless and actually are an important part of the healthy human gut. However, some *E. coli* cause illness, either diarrhoea or more serious disease.

One group of *E. coli* that cause diarrhoea is called **STEC** (Shiga toxin producing *E. coli*) – these produce toxins that can cause severe illness. News items about outbreaks of illness due to *E. coli* are usually referring to STEC. A common type of STEC is ***E. coli* O157**.

STEC is a notifiable disease. You may be contacted by public health to find out the source of infection and to prevent others getting sick.

What are the symptoms of STEC infection?

People usually get sick with STEC 3 to 4 days (generally less than 10 days) after getting infected. Symptoms of STEC may include:

- Diarrhoea (sometimes bloody)
- Stomach (tummy) pain
- Fever
- Vomiting

How do people get sick from STEC bacteria?

People get sick from STEC when the germs are swallowed. This can happen by eating or drinking something that has STEC germs, or by getting STEC germs on your hands and then touching your fingers to your mouth.

STEC germs come from faeces (poo, tūtae) of animals, particularly cattle and sheep. People can also spread STEC germs.

People can get sick by:

- Getting STEC germs on their hands, which may happen by
 - Changing nappies of children infected with STEC
 - Helping someone who is sick with STEC, including cleaning up diarrhoea
 - Touching animals or animal faeces (poo, tūtae), for instance on a farm or petting zoo, or by handling manure
- Close contact with others who are sick, for instance in an early childhood centre
- Eating food prepared by someone who is sick with STEC
- Drinking water that contains germs from cattle or sheep faeces (poo, tūtae)
- Drinking raw (unpasteurised) milk
- Eating food contaminated with cattle or sheep faeces (poo, tūtae): in other countries, hamburger meat, sprouts and unwashed salad greens have caused outbreaks of illness
- Swimming in water that contains germs from cattle or sheep faeces (poo, tūtae)

How bad is it?

The illness may last 5 to 10 days. Most people recover from STEC with no long term problems. Anyone developing bloody diarrhoea should seek medical attention, even if this means visiting the doctor a second time.

Symptoms can be severe in young children, the elderly and people with reduced immunity. Some people can develop Haemolytic Uraemic Syndrome (HUS) where their kidneys do not work properly. If HUS develops, specialist treatment in hospital is necessary. Antibiotic treatment can increase the risk of a child developing HUS. Symptoms of HUS may include:

- bruising, or a rash of fine red spots
- reduced urination
- drowsiness or confusion

If you think you or your child might have HUS seek medical attention.

How do you stop its spread?

- **Always wash and dry your hands thoroughly:**
 - after going to the toilet
 - after changing nappies or cleaning up accidents
 - before and after preparing food, particularly raw meat
 - after touching animals or their faeces (poo, tūtae), including contaminated clothes
 - after caring for a person with diarrhoea
- Thoroughly cook all minced meat (meatloaf, hamburgers) until there is no pink colour left
- Keep raw meat separate from cooked foods during preparation and storage
- Wash chopping boards and utensils after preparing raw meat
- Avoid raw (unpasteurised) milk, or heat to just below boiling. If you have a thermometer, heat to 70°C for 1 minute
- Always treat or boil drinking water sourced from streams, rivers, shallow bores or the roof.

What about work, school or early childhood centres?

Everybody with diarrhoea or vomiting should stay away from work, school or early childhood centres **until free of symptoms for 48 hours**. As you may be infectious for up to three weeks after the illness started, hand washing after using the toilet is very important to prevent the spread of the disease.

For further information please contact a Health Protection Officer from the Public Health Service:



MidCentral Public Health Service
Palmerston North: (06) 350 9110
Whanganui: (06) 348 1775

