

Campylobacter, E. coli and Salmonella



About these infections
and how to prevent them

What are Campylobacter,

(say 'cam-pile-oh-bac-ter')

E. coli and Salmonella?

Campylobacter, Escherichia coli (E. coli) and Salmonella are bacteria found in the gut of infected people and animals. They can also be found in water and some foods.

People with these infections usually get diarrhoea (runny poo). Some people, especially young children and older people, can get very ill.

How do you get infected?

Infected people or animals pass on the bacteria in their faeces (poo). The bacteria can pass into and contaminate (make unsafe) soil, food or water, or surfaces such as toys, bathroom taps or doors, and nappy change tables. You get infected when you swallow the bacteria, for example, by drinking contaminated water or touching your mouth with contaminated hands.

You can get infected by:

- handling raw meat or poultry
- eating contaminated raw or under cooked food
- eating contaminated bought food – for example, takeaways and at restaurants
- drinking contaminated water
- drinking raw milk or raw milk products
- having contact with faeces or faecal matter
- having contact with infected animals
- swimming or playing in contaminated 'recreational water', such as rivers and lakes
- travelling overseas.

Illness: Symptoms and timeframes

These infections cause similar symptoms. You need to see a doctor to find out which infection you have.

You may have some or all of the following:

- diarrhoea, which may have blood in it
- stomach pain or cramps, which may be severe
- flu-like symptoms, including headache, muscle pains, fever and fatigue (feeling very tired)
- nausea
- vomiting.

Some people, especially young children and older people, can get very ill and may need hospital treatment.

Campylobacter symptoms usually appear 1 to 10 days after becoming infected. Symptoms can last for up to 10 days.

E. coli symptoms usually appear 2 to 10 days after being infected. Most people get better within 10 days. Although most types of E. coli are harmless, some types, such as Shiga toxin-producing E. coli (STEC, also called verocytotoxigenic E. coli or VTEC), can cause serious illness.

Salmonella symptoms usually appear 6 to 72 hours after becoming infected. The symptoms usually last between 1 and 7 days but in more severe cases they can last up to 10 days.

If you have symptoms

If you have symptoms and think you're infected, this is what you should do.

- **Go to your doctor.** They may ask to test a specimen (small amount) of your faeces. Your doctor will give you advice on how to collect the specimen and what to do with it.
- **Take medicines** if your doctor prescribes them.
- **Drink plenty of water** while you have diarrhoea or vomiting.

- **Go back to your doctor** if you have a child that is ill and is not able to drink.
- **Stay away from school, early childhood centres or work** until at least 48 hours (2 days) after the symptoms have gone. However, you should also follow the advice of your doctor or local Public Health Service.

Campylobacter, E. coli or Salmonella are notifiable diseases – meaning that your doctor will inform the Medical Officer of Health of your local Public Health Service (PHS). The PHS may contact you to find out how you were infected. This helps to prevent more cases of the infection.

Preventing these infections

Here's what you can do to prevent getting Campylobacter, E. coli or Salmonella – or passing them on.

Wash your hands

Wash your hands thoroughly by using plenty of soap and hot water, cleaning between fingers and under fingernails, rinsing well and drying on a clean dry towel or paper towel:

- before and after preparing food
- after going to the toilet or changing a baby's nappy
- after caring for people who are ill
- after playing or working with animals.

General cleaning

Clean areas and surfaces (including toys) that may have become contaminated with a suitable cleaning solution.

Food safety

- Thaw meat in the fridge and not at room temperature.
- Keep raw meat covered and separate from other foods, and store at the bottom of the fridge.

- Use separate chopping boards when preparing raw foods and cooked foods, or wash the board in hot soapy water between preparing raw and cooked foods.
- Cook chicken thoroughly until the juices are clear.
- Cook all minced meat patties and sausages thoroughly.
- Avoid drinking raw milk and raw milk products.
- Avoid eating shellfish which has been gathered from contaminated waters.
- Wash fruit and vegetables before use.

If you have one of these infections, avoid preparing food for other people. If you must do so, wash and dry your hands well first.

Safe drinking water

- Avoid drinking water that has not been treated – including water from lakes, rivers or streams, or from an area where you don't know the quality of source water. If in doubt, make the water safe by boiling it or by installing an appropriate disinfection/filtration (treatment) unit. The performance of the treatment unit should meet the standard AS/NZS4348:1995.
- If you have to drink untreated water that is taken from a roof, river or lake (eg, in a rural area), it should be boiled for 1 minute or put through an appropriate treatment unit.

See also the Ministry of Health's publications *Water Collection Tanks and Safe Household Water* (code HE10148) and the booklet *Household Water Supplies* (code HE4602), available at www.healthed.govt.nz.

Swimming

Don't go swimming in a pool if you have diarrhoea. You need to wait at least 2 weeks after the symptoms have gone.

Bathing

If you or a child are unwell then do not share bathwater, as this can easily transmit infection.



For more information, speak to your doctor or nurse, or contact the Public Health Service (look in the phone book or search the internet for contact details). You can also call Healthline on 0800 611 116.

This resource is available from www.healthed.govt.nz or the Authorised Provider at your local DHB.

Revised December 2016. 04/2017. Code **HE1211**



New Zealand Government