What is it?

Typhoid fever is a disease caused by the bacteria *Salmonella typhi* which live in the intestines (gut) of people. Typhoid is said ‘tie-foid’. Paratyphoid fever is a similar illness caused by a similar bacteria but is usually a milder illness. In New Zealand, there are very few cases of typhoid or paratyphoid fever. Most people are infected while travelling overseas.

What are the signs and symptoms?

Typhoid and paratyphoid usually begin with a fever about 1 – 3 weeks after infection, but it could take only 3 days or as long as 3 months. If can cause an illness with:

- fever (gradual onset, increasing in severity, which may last more than a week).
- chills (feeling cold and shivery)
- not wanting to eat
- headache
- possibly a rash

Some people may also get diarrhoea, pronounced dy-a-rea, (runny poo) which may not appear until 3 weeks into the illness. Some people who have typhoid fever do not get sick, but may still carry the bacteria and can make others sick.

If you don’t have treatment it can last for 3-4 weeks and you can be infectious for more than 3 months afterwards.

If anyone in your family, or any visitors to your house has any of these symptoms, they should see their doctor as soon as possible. You will need to give the doctor a poo sample for testing for Typhoid.

It is not usually possible to get typhoid fever more than once.

How serious is it?

Typhoid or paratyphoid fever are rare but serious diseases in New Zealand and people will often need to go to hospital. Typhoid and paratyphoid fever are notifiable diseases under the Health Act. This means your doctor must tell the District Health Board (DHB) if they suspect you have it. A Health Protection Officer will contact you or your family for information to try to work out how you got typhoid fever, and to help stop other people from getting it too.

Who is most at risk?

Most cases of typhoid and paratyphoid fever in New Zealand have been caught during travel overseas, especially in tropical countries.

How could I get infected?

The bacteria live only in humans. People with typhoid and paratyphoid fever carry the bacteria in their blood and gut. Both ill people, and people who carry the bacteria but are not ill, pass the bacteria in their faeces (poos). You can get typhoid and paratyphoid fever if you eat or drink things that have been handled by a person who has the bacteria.

Untreated water supplies and shellfish gathered from areas where water is contaminated with poo are also potential sources of infection. In some countries this includes water used for washing food, raw fish, raw fruit and raw vegetables.
**How do I protect myself and others?**

- Regularly wash your hands with soap and dry them thoroughly especially after using the toilet or changing nappies. Hands should be washed for 20 seconds and then dried for 20 seconds using a clean cloth or disposable towel.

- Dirty clothing and bedding should be washed with hot soapy water separately from that of other family members. Face cloths and towels should not be shared with someone who is sick.

- A person with typhoid or paratyphoid fever should not make food for others until they are no longer infectious. In households where a person is recovering from typhoid, toilet seats, flush handles, wash basin taps and toilet door handles should be disinfected every day using bleach and water. The bleach and water should be on the surface for at least 30 minutes.

- The sick person should have paper towels or their own hand towel to dry their hands after using the toilet. Paper hand towels should be put in a bag and can go out with the rubbish. The hand towel should be washed regularly.

- Remember that people are infectious as long as the bacteria are present in their poos, so it is important to test people who have been sick, and people they have been in close contact with.

You can be vaccinated to prevent typhoid fever (but not paratyphoid fever) if you are travelling to places where there is an increased risk.

**Will I need to take time off work, school or preschool?**

All people with typhoid fever must stay away from work, school or day care until 48 hours after the symptoms stop.

If you have typhoid fever and are a food handler, health care worker, childcare worker or child attending daycare or preschool you will need to stay away from work/daycare/preschool until you have two consecutive poo samples tested negative for typhoid. This must be taken at least 48 hours apart after completing treatment with antibiotics.

People who have had close contact with a person with typhoid fever, including people in the same household, overseas travel group or in other high risk situations (e.g. a food handler or in a childcare setting), may be asked to provide one poo sample to check whether they are infected.

**How is it treated?**

Hospital admission is common. Antibiotics are recommended to treat a fever or persistent runny poo and may be used for those who are employed in high risk occupations such as food handling, early childhood services or health care.

**Where can I get further information?**

For further information on typhoid fever please contact your doctor or Hawke’s Bay District Health Board (and talk to the Population Health Team) on (06) 834 1815. You can also phone Healthline on 0800 611 116 at any time of the day or night to speak to a registered nurse.