

# Typhoid & paratyphoid

Typhoid is a type of bacterial infection also referred to as typhoid fever. Without prompt treatment it can cause serious complications and is sometimes fatal. There is also a milder version of typhoid called paratyphoid.

Most people with typhoid and paratyphoid are infected overseas in areas with poor sewage systems and limited access to clean water. Higher risk regions include the Pacific Islands, Asia, the Middle East, Central and South America, and Africa.

## How it spreads

Typhoid fever is highly infectious. People who have it can pass the bacteria out of their body in their poo (faeces) or, less commonly, in their pee (urine).

If you then eat food or drink water that's contaminated with bacteria from the infected poo or pee you can become infected too.

In developing countries common causes of infection include:

- drinking unsafe water
- eating shellfish collected from areas contaminated by raw sewage
- eating raw fish, fruit and vegetables

The bacteria that cause these illnesses are *Salmonella typhi* and *Salmonella paratyphi*.

## Symptoms

Symptoms can include:

- fever (high temperature)
- tiredness
- headache
- sweating
- tummy pain
- constipation or diarrhoea (runny poo)
- red rash on the stomach and chest
- cough

Symptoms normally develop around eight to 14 days after infection for typhoid, and anywhere from one to 10 days after infection for paratyphoid.

Sometimes people do not develop any symptoms. For others it can take up to 60 days to become unwell. If left untreated typhoid symptoms will continue to get worse over several weeks and the risk of developing potentially fatal complications increases.

# Te Whatu Ora

Health New Zealand

## If you have symptoms

**If you have symptoms contact your doctor urgently, or call Healthline for free on 0800 611 116. If you've been overseas recently you should mention this to the health professional.**

If your doctor thinks you have been infected they will require a sample of your faeces or blood for testing. Providing a sample ensures you're diagnosed and treated properly. Testing is free and your doctor will provide guidance on what you need to do.

## Treatment and recovery

If the test shows you have typhoid or paratyphoid you will likely need prompt treatment with antibiotics. These help you get better by clearing the infection from your body.

If you're diagnosed and treated early the infection can be more mild and you may be able to recover at home. While at home you should get plenty of rest, drink lots of water and eat healthy meals. You may need to go to hospital if your symptoms are severe.

Around 1 in 10 people with typhoid become unwell again after they have completed their treatment, and require additional antibiotics.

Around 1 in 100 people do not respond to treatment and continue to carry the bacteria in their body. They may require long-term antibiotic treatment to get rid of the infection.

## Restrictions

**If you have typhoid or paratyphoid you are at risk of passing it on to others.**

You will need to stay away from work, school or day care until at least 48 hours (2 days) after your symptoms have gone away.

Once you have recovered, health professionals will carry out tests to check if the bacteria is still in your body. You will need to provide two faeces samples, at least 48 hours apart. This is the only way to check if you still have the illness.

Adults working in high risk jobs and children attending day care can only return if these tests show they are no longer infectious (high risk jobs include food preparation, health care, and early childhood education). You will be given a letter when it's safe to return to work or day care.

## People you live with or travelled with

Depending on where you were potentially infected, people you live with or travelled with may also need to be tested and excluded if they work in a high risk job or attend day care or school. A health professional will provide information to you and your whānau on this if required. These people will be 'contacts'.

## Travelling overseas

If visiting a region where typhoid is common you can reduce your risk by:

- avoiding unsafe water, including ice and drinks mixed with water
- avoiding food from street stalls
- ensuring hot food is well cooked and eaten while still hot
- avoiding uncooked and raw food including fruit and vegetables (unless you are able to wash, prepare and peel them yourself)
- avoiding uncooked seafood
- avoiding unpasteurised milk or dairy foods
- getting vaccinated against typhoid by your GP or at a travel clinic

## For more information

For more information visit [www.arphs.nz/typhoid-fever](http://www.arphs.nz/typhoid-fever). For health advice you can call Healthline for free anytime on 0800 611 116.