

# Typhoid and paratyphoid

## Fact sheet

Typhoid is caused by two different serotypes of *Salmonella* bacteria. It is common in countries with poor sanitation or untreated drinking water. Typhoid vaccination is strongly recommended for people visiting friends and family in less developed countries.

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### What is typhoid and paratyphoid?

Typhoid and paratyphoid are diseases caused by the two different species of *Salmonella* bacteria. These diseases cause a similar illness. Paratyphoid infections tend to be less severe and less common than typhoid.

In Australia, most typhoid and paratyphoid infections are acquired overseas. These diseases are rare in Australia.

These infections are different to infection with other strains of *Salmonella* which usually causes gastroenteritis (gastro).

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### What are the symptoms of typhoid and paratyphoid?

People may experience mild or severe symptoms. The symptoms may include:

- prolonged fever
- sweating
- severe headache
- feeling generally unwell
- abdominal pains
- diarrhoea or constipation
- lack of appetite and weight loss.

Symptoms of typhoid usually start 8-14 days after infection. Symptoms can show as early as 3 days or as late as 60 days after infection. Symptoms of Paratyphoid usually show within 1-10 days.

If they are not treated, typhoid and paratyphoid can be fatal. It is important to speak to a doctor as soon as you have symptoms.

Most people recover fully over several weeks with treatment and symptoms usually stop in a week.

Some people even if they have no symptoms of illness continue to have bacteria in their faeces and/or urine for more than a year. These people are called carriers and can infect others.

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## How is typhoid and paratyphoid spread?

Typhoid is more common in countries that have poor sanitation, poor hand hygiene and food handling standards and untreated drinking water.

The bacteria that cause typhoid and paratyphoid are found in the faeces (poo) of infected individuals and sometimes in their urine.

Typhoid and paratyphoid spread when people eat or drink food or water contaminated with faeces. Flies may transfer the bacteria to food, or the food may have grown in, be prepared in or stored in contaminated water.

Uncooked fruits and vegetables and shellfish should be avoided in less developed countries.

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## Who is at risk of getting typhoid and paratyphoid?

In Australia, typhoid and paratyphoid is often only found in people who travel to areas where these diseases are common.

People who return to developing countries (in particular India, Pakistan and Bangladesh) to visit friends and relatives are at greatest risk of acquiring the disease.

Those who live with an infected person, or people who have travelled with a person infected with typhoid or paratyphoid, should be tested for typhoid.

People should see their general practitioner if they develop symptoms.

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## How is typhoid and paratyphoid prevented?

**People going to countries where typhoid and paratyphoid are common should:**

- wash their hands thoroughly with soap and water for at least 20 seconds after going to the toilet and before eating
- avoid uncooked foods, including fruit and vegetables (unless you are able to peel them yourself)
- drink bottled or boiled water (even when brushing teeth)
- not drink untreated water, including ice and drinks mixed with water
- avoid eating from street stalls
- ensure hot food is thoroughly cooked and eaten whilst hot.

Typhoid vaccination is recommended for all those aged two years and older going to countries where typhoid and paratyphoid are common.

There is no vaccination available for paratyphoid.

**People who have typhoid or paratyphoid, or who share a house with someone infected with typhoid:**

- will be required to take a number of stool tests to show whether they are still infectious or not

- must not work if their work involves food handling or caring for children, patients or the elderly until they are advised by their local Public health unit that they are able to return to work.
- should not prepare food for others until stool samples have shown that they are not infectious.

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## How is typhoid and paratyphoid diagnosed?

To diagnose typhoid and paratyphoid, your doctor or local hospital will test a blood or stool sample.

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## How is typhoid and paratyphoid treated?

Typhoid and paratyphoid can be treated with antibiotics. Antibiotic treatment is required to treat people who have no symptoms but may carry typhoid or paratyphoid .

If symptoms are severe, hospitalisation may be needed.

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## What is the public health response?

- Doctors, hospitals and laboratories must notify cases of typhoid or paratyphoid to the local public health unit.
- Public health unit staff will interview the doctor or patient (or carers) to find out how the infection occurred.
- The NSW Food Authority, in collaboration with NSW Health, is responsible for the environmental investigation of food handlers with typhoid or paratyphoid.
- Your local public health unit can advise further regarding exclusions from work and school. People excluded from work will need to have a number of stool tests done before they are allowed to return to work.

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## Related information

For further information please call your local Public Health Unit on 1300 066 055.