

Typhoid and Paratyphoid Fever

Typhoid and paratyphoid fever are diseases of the intestinal tract caused by the *Salmonella Typhi* and *Salmonella Paratyphi* bacteria. Typhoid is rare in developed countries where environmental hygiene is poor, as in many developing countries, typhoid is a major public health problem. The greatest risk exists to travellers visiting countries where the disease is common. In Queensland, several cases of paratyphoid fever are notified each year, most occurring in returned overseas travellers.

Signs and Symptoms:

The symptoms of typhoid fever may be mild or severe and may include prolonged fever, severe headache, malaise, constipation or diarrhoea, rose-coloured spots on the trunk and an enlarged spleen. Most people usually recover fully over several weeks, although it can be fatal if untreated. Relapses are common and occur in up to 20% of cases.

The symptoms of paratyphoid fever are similar but tend to be milder.

The time from contact with the bacteria to the start of symptoms is usually 8–14 days for typhoid and 1–10 days for paratyphoid fever.

Control

If you have been diagnosed with typhoid or paratyphoid fever you should stay away from work or school until you have completed treatment and have had no symptoms for 48 hours. If you handle food as part of your work, or if you care for patients or children or older people, it is important that you stay away from work for at least 48 hours and until you have had two negative faeces tests. Public health authorities will help to arrange faeces testing so you will know when it is safe to return to work.

People with typhoid or paratyphoid fever should not prepare food for others and should refrain from using swimming pools until they have completed treatment, and have had no symptoms for 48 hours.

If you have had close contact with someone who has typhoid or paratyphoid fever, you may also need faeces testing and to stay away from work, school or child care while awaiting the results. Contact your [Public Health Unit](https://www.health.qld.gov.au/system-governance/contact-us/contact-public-health-units) (<https://www.health.qld.gov.au/system-governance/contact-us/contact-public-health-units>) for advice.

Good hygiene is the single most effective way of reducing spread of the disease, particularly effective hand washing. Hand washing is especially important after using the toilet and before preparing or handling food.

Treatment:

Antibiotics are usually used for the treatment of typhoid and paratyphoid fever.

Transmission:

Typhoid and paratyphoid fevers are usually spread when faeces or urine from an infected person contaminates something that is transferred to another person's mouth. Contaminated water and food are the most common sources of infection. Flies may also spread the bacteria to food products.

A person is infectious for as long as the bacteria is present in the faeces or urine. This is usually from the first week of illness. With appropriate treatment, symptoms usually clear within a week and very few people shed the bacteria in their faeces for a longer period.

Without treatment about 10% of typhoid fever cases will be infectious for three months after becoming unwell and 2–5% will permanently shed the bacteria in their faeces.

Prevention:

Because the bacteria are passed in the faeces and urine of infected people, good hygiene is the most effective way of preventing the spread of the disease. Wash hands thoroughly with soap and water, rubbing together for at least 20 seconds and dry thoroughly. It is important to wash hands after going to the toilet, touching soiled linen or articles and before preparing or eating food.

Overseas travellers visiting high risk areas should avoid potentially contaminated water and food. Additional advice includes:

- drink only bottled water (even when brushing teeth)
- ask for drinks without ice and avoid ice blocks or popsicles that may have been made with contaminated water
- eat food that has been thoroughly cooked and that is still hot and steaming
- avoid raw vegetables and fruit that you cannot peel yourself
- avoid food and drinks from street vendors.

Typhoid vaccination is recommended for all travellers two years of age and older going to endemic regions where food hygiene may be suboptimal and drinking water may not be adequately treated. Vaccination should be completed at least two weeks prior to travel.

Other resources:

[Immunise Australia website](http://immunise.health.gov.au) (<http://immunise.health.gov.au>)

Help and assistance:

For further information please contact your local doctor or nearest [public health unit](https://www.health.qld.gov.au/system-governance/contact-us/contact/public-health-units) (<https://www.health.qld.gov.au/system-governance/contact-us/contact/public-health-units>) or the 13HEALTH information line (13 43 25 84).

If you are in an emergency situation, call 000

References

Heymann,D.L (2015) *Control of Communicable Diseases Manual*, 20th edition. Washington, DC: American Public Health Association.

Department of Health and Ageing, *The Australian Immunisation Handbook* 10th edition (2017 update). Canberra: Australian Government Department of Health, 2017.

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