

# Paratyphoid Fever (also known as enteric fever)

## What is it?

Paratyphoid Fever is a disease caused by the bacterium (germ) *Salmonella* Paratyphi A, B and very rarely C. It is a less severe disease than typhoid fever. Most cases in New Zealand have been caught during travel overseas, especially in tropical countries. There are two clinical forms, a systemic infection (with the bacteria distributed throughout the body), and a non-systemic infection causing gastro-enteritis.

## How common is Paratyphoid Fever?

Paratyphoid fever is rare in New Zealand, with about 20 known cases a year.

## What are the symptoms?

In systemic paratyphoid fever the symptoms are similar to typhoid fever. There is a slow onset of fever, chills (feeling cold and shivery), stomach pain, headache, feeling unwell, loss of appetite, a dry cough early in the illness, and sometimes a rash of pink spots on the chest and abdomen. Constipation is more common in adults than diarrhoea.

In non-systemic paratyphoid fever there is a sudden onset of headache, abdominal pain, diarrhoea, nausea and vomiting.

**If anyone in your family, or any visitors to your house have symptoms they should see a doctor as soon as possible.**

Once you are infected with systemic paratyphoid fever it usually takes 1 – 3 weeks for symptoms to develop, but only 1 – 10 days if you have non-systemic paratyphoid fever.

## How serious is it?

The illness is usually milder than typhoid fever, shorter in duration, and with fewer complications. However, it may require hospitalisation and be a longer illness.

## How long is someone infectious?

As long as paratyphoid bacteria excreted in the person's faeces (poos) they are infectious. Some people excrete the bacteria from the start of the illness to up to 3 months after showing symptoms. A few (less than in typhoid fever) become permanent carriers of paratyphoid fever bacteria in their gallbladders.

This is why clearance of patients (see below) is so important.

## How do you get Paratyphoid Fever?

Humans are the main source of paratyphoid fever.

You can get paratyphoid fever if you eat food and drink that have been handled by a person who is passing the bacteria. Important sources in some countries include water used for drinking and washing food (if it is contaminated with bacteria from sewage), shellfish (particularly oysters) from sewage-contaminated beds, raw fish, raw fruit and raw vegetables, contaminated milk/milk products (usually through the hands of carriers of the disease).

Flies may carry the bacteria from human faces to contaminate food and water.

Turtles and tropical fish kept at home may also carry the bacteria. These animals excrete the bacteria without themselves becoming sick. People can get infected by not washing their hands thoroughly after cleaning fish tanks, touching the water, objects inside the tanks, or the fish, or turtles. Paratyphoid bacteria on hands can get to the intestine to cause infection through hand to mouth contact or be transferred to food that is eaten.

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## How do you prevent the spread?

Thorough hand washing after going to the toilet or changing nappies of an infected infant, and before handling food, is the most important way to control spread.

The person with paratyphoid fever must NOT prepare food for anyone other than themselves until cleared to do so by Regional Public Health.

Soiled clothing and linen should be washed in hot soapy water separately from that of others in the home. Face cloths and towels should not be shared with the ill person.

Toilet seats, flush handles, wash basin taps and toilet door handles should be disinfected daily with a bleach solution.

The ill 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 faeces (poos). That is why it is so important to test the faeces of cases and contacts to make sure that they are clear.

Regional Public Health arranges clearance tests for ill people and the people they have contact with.

## When can I go back to work, school or early childhood centre?

All people with paratyphoid fever are required to be excluded from work until well. This is usually 48 hours after symptoms stop. People who work in occupations where paratyphoid could easily spread (food handlers, water supply operators, certain health care staff), school (children), or early childhood centres (staff and children) are excluded from work until they have been cleared. Other close or household contacts do not need to be excluded but do need to be cleared.