



July 2011

Community and Health Services Department



# Typhoid & Paratyphoid Fevers

(*Salmonella typhi*)

## What is typhoid fever?

Typhoid fever is a life-threatening illness. It is caused by the bacterium *Salmonella typhi*. Paratyphoid fever is similar in symptoms as typhoid fever, but tends to be milder. Paratyphoid fever is caused by the bacterium *Salomonella paratyphi*. The disease occurs in areas such as the Indian sub-continent, Latin America, the Middle East, and Africa.

## What are the symptoms of typhoid fever?

Symptoms of typhoid fever include fever, headache, weakness, loss of appetite, lower heart rate, enlarged spleen, constipation or diarrhea, non-productive cough and rose-coloured spots on the body. Other symptoms may include difficulty hearing and swelling of the glands that produce saliva. Intestinal bleeding and tears can occur in untreated cases. Severe forms of typhoid with changes in behaviour have been associated with high cases of death. A person with typhoid may develop relapses.

The seriousness of symptoms depends on a few factors: the type of bacteria, the amount of bacteria taken in by the person, how long someone has been ill before seeking treatment for typhoid, the person's age and his/her previous exposure to the typhoid vaccine.

The symptoms for typhoid fever may develop between three days and 60 days after exposure to the bacteria, but usually within eight to 14 days. Symptoms for paratyphoid fever develop between one and 10 days after exposure to the bacteria.

## How does typhoid fever spread?

*S. typhi* lives only in humans. *S. paratyphi* lives in humans and possibly in domestic animals. Persons with typhoid fever carry the bacteria in their blood and intestine. A small number of people with typhoid fever, called carriers, recover from typhoid fever but continue to carry the bacteria. Both people ill with typhoid fever and carriers shed the bacteria in their feces (stool) and urine.

You can get typhoid fever if you eat or drink items that have come in contact with the bacteria (e.g., contaminated shellfish, raw fruits and vegetables and contaminated milk/milk products).

People with *S. typhi* or persons who become carriers should be excluded from all work involving food handling, child care, or health care until tests show at least three consecutive negative stool samples.

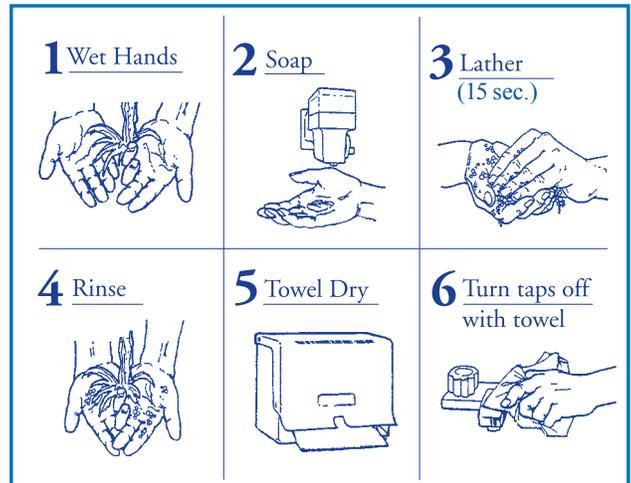
If household members or people in close contact with the infected person show symptoms of the illness, they should be excluded from work involving food handling, child care, or health care until at least two negative stool and urine samples are obtained.

For further information, please call:  
**York Region Health Connection 1-800-361-5653**  
**TTY 1-866-252-9933 or visit [www.york.ca](http://www.york.ca)**

## How can typhoid fever be prevented?

Typhoid fever can be prevented through the following measures:

- **Practise good hand hygiene.** This is the most effective way to stop the spread of typhoid fever
- Wash hands frequently for at least 15 seconds using the 6-step method, and especially:
  - After using the washroom
  - After changing diapers
  - Before preparing or eating food
- Avoid untreated water, unpasteurized milk and uncooked foods
- Prepare and handle food carefully - refrigerate items as appropriate
- Consider vaccination against typhoid at least one week before travel



## How can typhoid fever be treated?

People with typhoid and paratyphoid fevers can be treated with antibiotics. People with severe typhoid can be treated with antibiotics and high dose steroids.

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