Typhoid Fever

Typhoid fever is a life-threatening illness caused by the bacterium *Salmonella* Typhi.

*Typhoid fever is still common in the developing world including some of the Pacific Island countries, and in Fiji you have heard of outbreak associated with public gatherings and feasting. Fiji Ministry of Health has issued typhoid alert after rising numbers of cases since last week. So far 44 cases have been found in the country this year and 32 in Central Eastern division.*

How is typhoid fever spread?

*Salmonella* Typhi lives only in humans. Persons with typhoid fever carry the bacteria in their blood stream and intestinal tract. In addition, a small number of persons, called carriers, recover from typhoid fever but continue to carry the bacteria. Both ill persons and carriers shed *S. Typhi* in their feces (stool).

You can get typhoid fever if you eat food or drink beverages that have been handled by a person who is shedding *S. Typhi* or if sewage contaminated with *S. Typhi* bacteria gets into the water you use for drinking or washing food. Therefore, typhoid fever is more common in areas of the world where hand washing is less frequent and water is likely to be contaminated with sewage.

Once *S. Typhi* bacteria are eaten or drunk, they multiply and spread into the bloodstream. The body reacts with fever and other signs and symptoms.

Where in the world do you get typhoid fever?

Typhoid fever is common in most parts of the world except in industrialized regions such as the United States, Canada, western Europe, Australia, and Japan. Therefore, if you are traveling to the developing world, you should consider taking precautions.

How can you avoid typhoid fever?

Two basic actions can protect you from typhoid fever:

Typhoid fever can be prevented and can usually be treated with antibiotics.
1. Avoid risky foods and drinks.
2. Get vaccinated against typhoid fever (this option may not be available readily in our settings, is generally taken one week before travel to high risk areas, does not provide full immunity).

It may surprise you, but watching what you eat and drink when you travel is as important as being vaccinated. This is because the vaccines are not completely effective. Avoiding risky foods will also help protect you from other illnesses, including travelers’ diarrhea, cholera, dysentery, and hepatitis A.

- If you drink water, buy it bottled or bring it to a rolling boil for 1 minute before you drink it. Bottled carbonated water is safer than uncarbonated water.
- Ask for drinks without ice unless the ice is made from bottled or boiled water. Avoid popsicles and flavored ices that may have been made with contaminated water.
- Eat foods that have been thoroughly cooked and that are still hot and steaming.
- Avoid raw vegetables and fruits that cannot be peeled. Vegetables like lettuce are easily contaminated and are very hard to wash well.
- When you eat raw fruit or vegetables that can be peeled, peel them yourself. (Wash your hands with soap first.) Do not eat the peelings.
- Avoid foods and beverages from street vendors. It is difficult for food to be kept clean on the street, and many travelers get sick from food bought from street vendors.

“What are the signs and symptoms of typhoid fever?”

Symptoms usually develop 1–3 weeks after exposure, and may be mild or severe. Persons with typhoid fever usually have a sustained fever as high as 103° to 104° F (39° to 40° C). They may also feel weak, or have stomach pains, headache, or loss of appetite. In some cases, patients have a rash of flat, rose-colored spots. The only way to know for sure if an illness is typhoid fever is to have samples of stool or blood tested for the presence of S. Typhi.

“What do you do if you think you have typhoid fever?”
If you suspect you have typhoid fever, see a doctor immediately. If you are traveling in a foreign country, you can usually call SPC office in-country for a list of recommended doctors.

You will probably be given an antibiotic to treat the disease. Three commonly prescribed antibiotics are ampicillin, trimethoprim-sulfamethoxazole, and ciprofloxacin. Persons given antibiotics usually begin to feel better within 2 to 3 days, and deaths rarely occur. However, persons who do not get treatment may continue to have fever for weeks or months, and as many as 20% may die from complications of the infection.

**Typhoid fever's danger doesn't end when symptoms disappear**

Even if your symptoms seem to go away, you may still be carrying S. Typhi. If so, the illness could return, or you could pass the disease to other people. In fact, if you work at a job where you handle food or care for small children, you may be barred legally from going back to work until a doctor has determined that you no longer carry any typhoid bacteria.

*If you are being treated for typhoid fever,* it is important to do the following:
- Keep taking the prescribed antibiotics for as long as the doctor has asked you to take them.
- Wash your hands carefully with soap and water after using the bathroom, and do not prepare or serve food for other people. This will lower the chance that you will pass the infection on to someone else.

Have your doctor perform a series of stool cultures to ensure that no *S. typhi* bacteria remain in your body.

For more information, visit [www.cdc.gov/ncidod/dbmd/diseaseinfo/typhoidfever_g.htm](http://www.cdc.gov/ncidod/dbmd/diseaseinfo/typhoidfever_g.htm), [http://www.who.int/topics/typhoid_fever/en/](http://www.who.int/topics/typhoid_fever/en/)