

### **What is typhoid fever?**

Typhoid fever is a serious illness caused by a bacteria called *Salmonella typhi*. In the U.S. about 400 cases occur annually, and 70% of these are acquired while traveling internationally. Typhoid fever is still common in developing countries and affects about 12.5 million persons each year.

### **Who gets typhoid fever?**

Any person can get typhoid fever, but those who travel, especially to developing countries are at increased risk.

### **Where is typhoid fever found?**

Typhoid fever is most common in non-industrialized countries. Travelers to Asia, Africa, Eastern Europe, and Latin America are especially at risk.

### **How is typhoid fever spread?**

*Salmonella typhi* bacteria are shed in the urine or stool of infected persons, including chronic carriers. There are no known animal reservoirs for typhoid fever. Typhoid fever is spread by eating or drinking contaminated food or water or by direct or indirect contact with fecal material from infected persons.

### **What are the symptoms of typhoid fever?**

Symptoms of *Salmonella typhi* infection may be mild to severe and can include fever, headache, loss of appetite, constipation or diarrhea, and nonproductive cough.

### **How soon after exposure do symptoms appear?**

The symptoms may appear 3 days to 3 months (depending on the number of bacteria ingested), but onset of illness usually occurs 1-3 weeks after exposure.

### **For how long can an infected person carry *Salmonella typhi*?**

The time period that a person can have *Salmonella typhi* in their stool is variable. About 10% of untreated patients may shed infectious bacteria in their stool up to 3 months after onset of symptoms and 2%-5% may become permanent shedders. These permanent shedders are called chronic carriers.

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### **Do infected people need to be isolated or excluded from work or school?**

Patients with *Salmonella typhi* should be excluded from all work involving food handling, day care providers, or health care until at least 3 consecutive negative stool cultures taken at least 24 hours apart and at least 48 hours after antibiotic therapy has stopped and not earlier than one month after the onset of illness.

### **Should contacts be tested?**

Household and close contacts should be excluded from high-risk occupations (i.e., foodhandlers, day care workers, and healthcare professionals) until at least 2 negative stools samples taken 24 hours apart are obtained.

### **Can typhoid fever be treated?**

Patients with typhoid fever or contacts to typhoid fever should immediately seek medical attention. Typhoid fever can be effectively treated with antibiotic therapy. Several new drugs have produced excellent results in the treatment for carriers, but follow-up cultures are necessary to confirm cure.

### **How can typhoid fever be prevented?**

When traveling to endemic areas for typhoid fever, avoid risky foods and drinks (uncooked foods, non-bottled water or drinks made with ice). Consider vaccination against typhoid at least 1 week before travel.