

## **PARATYPHOID FEVER: Notes about the Disease**

Paratyphoid fever (which is rare in the United States) clinically resembles typhoid and has been lumped with typhoid in disease classifications until 2019 when it was decided by the Council of State and Territorial Epidemiologists to be independently reported. There are three distinct *Salmonella* serovars that can cause paratyphoid: Paratyphi A; Paratyphi B (tartrate negative); and Paratyphi C. Paratyphi B is differentiated into 2 distinct pathotypes on the basis of their ability to ferment tartrate—one is unable to ferment tartrate and is associated with paratyphoid fever (referred to as Paratyphi B), and the other ferments tartrate and is associated with uncomplicated gastroenteritis (referred to as Paratyphi B var. L(+) tartrate+).

Only a handful of paratyphoid cases are reported annually in North Carolina. In the United States, about 125 people are diagnosed with paratyphoid fever each year, most often after traveling outside of the United States. Approximately 92% of paratyphoid fever cases in the United States occur among international travelers; of those, 91% of paratyphoid fever cases caused by Paratyphi A are acquired by travelers to southern Asia (primarily India, Pakistan, or Bangladesh). Cases of paratyphoid fever caused by Paratyphi B and Paratyphi C are rarely reported.

Paratyphoid fever is acquired through consumption of water or food contaminated by feces of an infected person. Humans are the only source of this bacterium; no animal or environmental reservoirs have been identified.

The incubation period of typhoid and paratyphoid infections is 6–30 days. The onset of illness is insidious, with gradually increasing fatigue and a fever that increases daily from low-grade to as high as 102°F–104°F (38°C–40°C) by the third to fourth day of illness. Paratyphoid fever is usually described as less severe than typhoid fever; however, severe cases of Paratyphi A infection have been reported from Asia.

Food and water precautions are the only prevention method, as no vaccines are available for paratyphoid fever.

### **References**

Centers for Disease Control and Prevention. (2020). Typhoid and Paratyphoid Fever. Atlanta: CDC. Retrieved 24 May 2021, from [https://www.cdc.gov/typhoid-fever/pdf/TyphoidFeverGeneral-B-Typhoid-Paratyphoid-Fever\\_508.pdf](https://www.cdc.gov/typhoid-fever/pdf/TyphoidFeverGeneral-B-Typhoid-Paratyphoid-Fever_508.pdf)

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