Salmonella Typhi (Typhoid Fever)

(Salmonella enterica serotype Typhi)

2019 Case Definition

CSTE Position Statement(s)

18-ED-08

Clinical Criteria

Infections caused by *Salmonella enterica* serotype Typhi (*S*. Typhi) are often characterized by insidious onset of sustained fever, headache, malaise, anorexia, relative bradycardia, constipation or diarrhea, and non-productive cough. However, mild and atypical infections may occur. Carriage of *S*. Typhi may be prolonged.

One or more of the following:

- Fever
- Diarrhea
- Abdominal cramps
- Constipation
- Anorexia
- Relative bradycardia

Laboratory Criteria

Confirmatory laboratory evidence:

• Isolation of S. Typhi from a clinical specimen.

Presumptive laboratory evidence:

 Detection of S. Typhi in a clinical specimen using a culture-independent diagnostic test (CIDT¹).

Note: Serologic testing (i.e., detection of antibodies to S. Typhi) should not be utilized for case classification.

Epidemiologic Linkage

- Epidemiological linkage to a confirmed S. Typhi infection case, OR
- Epidemiological linkage to a probable S. Typhi infection case with laboratory evidence, OR
- Member of a risk group as defined by public health authorities during an outbreak.

Criteria to Distinguish a New Case from an Existing Case

• A new case should be created when a positive laboratory result is received more than 365 days after the most recent positive laboratory result associated with a previously reported case in the same person.

Case Classification

Confirmed

A person who meets the confirmed laboratory criteria for diagnosis.

Probable

- A clinically compatible illness in a person with presumptive laboratory evidence.
- A clinically compatible illness in a person with an epidemiological linkage.

Notes:

- It is estimated that approximately 2-5% of persons infected with *S*. Typhi become chronic intestinal carriers who continue to shed *S*. Typhi for more than one year. These people are typically referred to as chronic carriers.
- This case definition does not exclude persons with a previously reported *S*. Typhi Infection case from being counted as a new case if the subsequent positive laboratory result is more than 365 days from the most recent positive laboratory result associated with the existing case.

¹ Culture-independent diagnostic testing includes PCR, EIA, ELISA, and other antigen detection tests. It does NOT include Antibody testing.