

Typhus Fever

EXCLUDES: All other Rickettsia species. See Spotted Fever Rickettsiosis.





Typhus Fever (*Rickettsia prowazekii, Rickettsia typhi,* or *Orentia tsutsugamushi*)

Clinical Description, Critical Reporting Elements, and Comments

Clinical Description:

A group of arthropod-borne diseases with three clinically distinct presentations, each with its own specific infectious agent and vector including:

Epidemic (Louse-borne) Typhus: (*Rickettsia prowazekii*) An illness characterized by any reported fever and one or more of the following: rash, headache, chills, prostration, and general pain. The macular or maculopapular rash appears on the fifth to sixth day, initially on the upper trunk followed by spread to the entire body, but usually sparing the face, palm, and soles. The infectious agent is transmitted by body lice. Most commonly found in the colder (i.e., mountainous) regions of central and eastern Africa, Central and South America, and Asia. In the United States, rare cases of epidemic typhus, called sylvatic typhus, can occur after exposure to flying squirrels and their nests. <u>Murine (Endemic) Typhus</u>: (*Rickettsia typhi*) Similar to louse-borne typhus, but often milder. The infectious agent is transmitted by fleas. Endemic in Mediterranean countries, some African, Central American, and South American countries, some coastal states in the USA, and Southeast Asia.

<u>Scrub Typhus</u>: (*Orientia tsutsugamushi*) Often produces a primary "punched out" skin eschar corresponding to the primary attachment of an infected mite. Acute onset of symptoms follows within several days, characterized by fever, headache, profuse sweating, conjunctival injection, and lymphadenopathy. A dull red maculopapular eruption appears on the trunk late in the first week, gradually extending to the extremities. It is endemic to Southeast Asia, Indonesia, China, Japan, India, and northern Australia.

Critical Reporting Elements and Comments:

- Specify the clinical form of the disease.
- Document relevant travel and deployment history occurring within the incubation period (epidemic or murine typhus: 1–2 weeks; scrub typhus: 6–12 days).
- Document the circumstances under which case patient was exposed including duty exposure, occupational activities, environmental exposures, or other high-risk activities.

There can be antibody cross-reactivity between spotted fever and typhus group antigens. In cases where IgM or IgG titers are positive for both diseases, report the case under the disease most consistent with the case's clinical presentation, exposure history, and travel history.