

ROCKY MOUNTAIN SPOTTED FEVER

What is Rocky Mountain spotted fever (RMSF)?

RMSF is a bacterial disease caused by a bacterium, *Rickettsia rickettsii*. Contrary to its name, most cases of RMSF occur in the southeastern and south-central United States. Cases occur most frequently between April and September. In California, only a few cases are reported each year.

How do you get RMSF?

RMSF bacteria are transmitted by the bite of an infected tick. A tick must be attached to the skin for at least four to six hours before it can infect a person. Infection can also occur if crushed tissues or feces of the tick contaminate breaks in the skin or mucous membranes. The tick that most commonly transmits the RMSF bacteria in California is the Pacific Coast tick, *Dermacentor occidentalis*. The Rocky Mountain wood tick, *Dermacentor andersoni* may also transmit the bacteria in California.

How is RMSF maintained in nature?

Ticks become infected when they feed on infected rodents or rabbits. Although dogs may acquire RMSF, they do not transmit RMSF; however, they may bring infected ticks into the human environment.

What are the symptoms of RMSF?

RMSF is characterized by sudden onset of moderate to high fever 2-14 days after a tick bite. Without treatment, the fever can persist for two to three weeks and lead to other symptoms, such as weakness, deep muscle pain, severe headache, chills, blood-shot eyes, and a painful abdomen. In at least half of the reported cases in California, a rash appears that rapidly spreads to much of the body, including the palms of the hands and soles of the feet. Severe cases can result in kidney failure and death.

How is RMSF diagnosed?

Early diagnosis of RMSF relies on symptoms and history or suspicion of a tick bite. Blood tests are not useful within the first week of illness. During the early stages of the disease, the bacteria may also be seen microscopically in skin or in blood. Blood tests later in the illness can show the body's immune response to infection with the RMSF bacteria.

What treatment is recommended for RMSF patients?

RMSF patients are treated with antibiotics. Up to 25 percent of patients who receive delayed or no treatment may die.

Where can I find more information on RMSF?

The Centers for Disease Control and Prevention has information available at their website <http://www.cdc.gov/ncidod/dvrd/rmsf/index.htm>.