

Rocky Mountain Spotted Fever

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Rocky Mountain Spotted Fever (RMSF) in humans is usually caused by infection with the rickettsial agent *Rickettsia rickettsii* following tick exposure. In most cases a mild febrile illness develops after an incubation period of a few days to 2 weeks.¹ A tick bite may or may not be apparent and malaise, muscle pain, headache and chills are not uncommon. About one-half of the cases also develop a maculopapular rash, petechial or hemorrhagic, that appears first on the extremities and spreads to the trunk. Over 90% of the thousand rickettsial diseases that occur annually in the United States are RMSF.²

In the early 1970's an increase in cases of reported RMSF in Florida paralleled national trends. Until then, this disease was diagnosed infrequently in the state with only 25 confirmed cases reported in the 31 year period between 1942 and 1972. Documentation of the travel history on these cases indicated that only two may have been acquired in Florida.³ Between 1973 and 1976 the HRS Division of Health investigated 15 confirmed cases and found that 12 (80%) had no travel history outside of the state. In 1985, Sacks and Janowski reviewed the histories of 49 confirmed RMSF cases reported in Florida between 1973 and 1983.⁴ Analysis of the 25 cases believed to have been acquired in the state showed that RMSF infections tended to occur during the warmer months, March through November, with a peak in August. Cases ranged in age from 2 to 72 years; the median age was 24 years. Males accounted for 68% and whites 88% and exposure was linked to 21 different counties. Sixteen of the cases (64%) had a known tick bite or attachment, three (12%) had been deticking an animal and 6 (24%) had no known tick exposure. However, those in the latter group had a history of contact with dogs or outdoor activities. The principal tick vectors in Florida are probably the dog tick (*Dermacentor variabilis*) and the Lone Star tick (*Amblyomma americanum*).

An additional 46 cases of RMSF were reported between 1984 and 1993. Of the 12 confirmed cases reported during 1994 (5) and 1995 (7), nine (69%) were acquired in Florida between February and October. Four (80%) of 5 confirmed cases reported in 1996 and all five cases reported in 1996 (4) and 1997 (1) were locally acquired. Historically, more cases have occurred in northern counties. Still, it appears that there is a potential risk for RMSF wherever persons are exposed to ticks.

References

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