

eradicate the insects. Suggestions for minimizing exposure when traveling include inspecting the mattresses for signs of infestation; encasing mattress covers may be helpful. Thorough washing of all clothing and bed linens may also help minimize exposure. The use of pesticides and various other control measures is discussed in [Doggett, Dwyer, Peñas, and colleagues \(2012\)](#).

Systemic Disorders Related to Skin Lesions

Rickettsial Infections

The organisms responsible for a number of disorders are transmitted to human beings via arthropods ([Table 6-7](#)). Mammals become infected only through the bites of infected lice, fleas, ticks, and mites—all of which serve as both infectors and reservoirs. Rickettsiae are intracellular parasites, similar in size to bacteria, that inhabit the alimentary tract of a wide range of natural hosts. Rickettsial diseases are more common in temperate and tropical climates where humans live in association with arthropods. Infection in humans is incidental (except epidemic typhus) and not necessary for the survival of the rickettsial species. However, after the organism invades a human, it causes a disease that varies in intensity from a benign, self-limiting illness to a disease that is fulminating and fatal.

TABLE 6-7
Conditions Caused By Rickettsiae

Disorder, Organism, and Host	Manifestations	Management	Comments
Rocky Mountain spotted fever: <i>Rickettsia rickettsii</i> Arthropod: Tick Transmission: Tick Mammal source: Wild rodents; dogs	Gradual onset: Fever, malaise, anorexia, myalgia Abrupt onset: Rapid temperature elevation, chills, vomiting, myalgia, severe headache Maculopapular or petechial rash primarily on extremities (ankles and wrists) but may spread to other areas,	Control: Protection from tick bite by wearing proper apparel, tick repellent Tetracycline or chloramphenicol Vigorous supportive therapy	Usually self-limiting in children Onset in children may resemble that of any infectious disease Severe disease rare in children Children and dogs should be inspected regularly if they play in wooded areas