	characteristically on palms and soles		See later in chapter for management of ticks and tick removal
Epidemic typhus: *Rickettsia prowazekii* Arthropod: Body louse Transmission: Infected feces into broken skin Mammal source: Humans	Abrupt onset of chills, fever, diffuse myalgia, headache, malaise Maculopapular rash becomes petechial 4 to 7 days later, spreading from trunk outward	Control: Immediate destruction of vectors Tetracycline or chloramphenicol Supportive treatment	Isolate patient until deloused See discussion earlier in chapter for management of pediculosis Excreta from infected lice also in dust—patient's clothing, bedding, and possessions should be disinfected and washed in hot water
Endemic typhus: *Rickettsia typhi* Arthropod: Rat fleas or lice Transmission: Flea bite; inhalation or ingestion of flea excreta Mammal source: Rats	Headache, arthralgia, backache followed by fever; may last 9 to 14 days Maculopapular rash after 1 to 8 days of fever; begins in trunk and spreads to periphery; rarely involves face, palms, soles	Control: Eliminate rat reservoir, insect vectors, or both Tetracycline or chloramphenicol Supportive treatment	Fairly common in United States Shorter duration than epidemic typhus Mild, seldom fatal illness Difficult to distinguish from epidemic typhus
Rickettsialpox: *Rickettsia akari* Arthropod: Mouse mite Transmission: Mite Mammal source: House mouse	Maculopapular rash following primary lesion; eschar at site of bite; fever, chills, headache	Control: Eradication of rodent reservoir and mite vector Tetracycline or chloramphenicol Supportive treatment	Self-limiting, nonfatal disease Endemic in New York City Found in many cities in United States

Lyme Disease

Lyme disease is the most common tick-borne disorder in the United States. It is caused by the spirochete *Borrelia burgdorferi*, which enters the skin and bloodstream through the saliva and feces of ticks, especially the deer tick (Moreno, 2011). Most cases of Lyme disease are reported in the Northeast from southern Maine to northern Virginia in the months of April through October and more commonly occur in children 5 through 9 years old and adults 55 through 59 years old (American Academy of Pediatrics, 2015).

Clinical Manifestations

The disease may be initially seen in any of three stages. The first