

Tick ID



BLACKLEGGED TICK

Ixodes scapularis

Where found: Widely distributed in the northeastern and upper midwestern United States.

Transmits: Lyme disease, anaplasmosis, babesiosis, and Powassan disease.

Comments: The greatest risk of being bitten exists in the spring, summer, and fall. However, adults may be out searching for a host any time winter temperatures are above freezing. Stages most likely to bite humans are nymphs and adult females.



LONE STAR TICK

Amblyomma americanum

Where found: Widely distributed in the southeastern and eastern United States.

Transmits: *Ehrlichia chaffeensis* and *Ehrlichia ewingii* (which cause human ehrlichiosis), tularemia, and STARI.

Comments: A very aggressive tick that bites humans. The adult female is distinguished by a white dot or "lone star" on her back. Lone star tick saliva can be irritating; redness and discomfort at a bite site does not necessarily indicate an infection. The nymph and adult females most frequently bite humans and transmit disease.



AMERICAN DOG TICK

Dermacentor variabilis

Where found: Widely distributed east of the Rocky Mountains. Also occurs in limited areas on the Pacific Coast.

Transmits: Tularemia and Rocky Mountain spotted fever.

Comments: The highest risk of being bitten occurs during spring and summer. Dog ticks are sometimes called wood ticks. Adult females are most likely to bite humans.



Engorged female *Ixodes scapularis* tick. Color may vary.



NOTE: Illustrations are not to scale.

Tick ID



BROWN DOG TICK

Rhipicephalus sanguineus

Where found: Worldwide.

Transmits: Rocky Mountain spotted fever (in the southwestern U.S. and along the U.S.-Mexico border).

Comments: Dogs are the primary host for the brown dog tick in each of its life stages, but the tick may also bite humans or other mammals.



Steve Jacobs, PSU Entomology

GROUNDHOG TICK

Ixodes cookei

Where found: Throughout the eastern half of the U.S. and Canada.

Transmits: Powassan disease.

Comments: Also called woodchuck ticks. All life stages feed on a variety of warm-blooded animals, including groundhogs, skunks, squirrels, raccoons, foxes, weasels, and occasionally people and domestic animals.



GULF COAST TICK

Amblyomma maculatum

Where found: Coastal areas of the U.S. along the Atlantic coast and the Gulf of Mexico.

Transmits: *Rickettsia parkeri* rickettsiosis, a form of spotted fever.

Comments: Larvae and nymphs feed on birds and small rodents, while adult ticks feed on deer and other wildlife. Adult ticks have been associated with transmission of *R. parkeri* to humans.



ROCKY MOUNTAIN WOOD TICK

Dermacentor andersoni

Where found: Rocky Mountain states and southwestern Canada from elevations of 4,000 to 10,500 feet.

Transmits: Rocky Mountain spotted fever, Colorado tick fever, and tularemia.

Comments: Adult ticks feed primarily on large mammals. Larvae and nymphs feed on small rodents. Adult ticks are primarily associated with pathogen transmission to humans.



O. hermsi tick, before and after feeding. Photo taken by Gary Hettrick RML, NIAID.

SOFT TICK

Ornithodoros spp.

Where found: Throughout the western half of the U.S. and southwestern Canada.

Transmits: Tick-borne relapsing fever (*Borrelia hermsii*, *B. parkerii*, or *B. turicatae*)

Comments: Humans typically come into contact with soft ticks when they sleep in rodent infested cabins. The ticks emerge at night and feed briefly while the person is sleeping. The bites are painless, and most people are unaware that they have been bitten.



WESTERN BLACKLEGGED TICK

Ixodes pacificus

Where found: Along the Pacific coast of the U.S., particularly northern California.

Transmits: Anaplasmosis and Lyme disease.

Comments: Nymphs often feed on lizards, as well as other small animals. As a result, rates of infection are usually low (~1%) in adults. Stages most likely to bite humans are nymphs and adult females.