

Know Your Ticks

Pictures
Behaviors
Geography
Diseases they can transmit

A practical introduction to major
disease-vector ticks



Tickborne disease requires the right chain

1**Correct tick**

Only certain tick species can transmit a given pathogen.

2**Infected host**

A feeding tick acquires a pathogen from an infected host.

3**Attached feeding**

The tick attaches and feeds; transmission time varies by pathogen.

4**Human exposure**

An infected tick may transmit a pathogen during feeding.

Key idea: tick presence does not equal disease risk—and prompt removal matters.

Three tick groups explain many U.S. disease risks

IXODES



LOOK: Dark shield and legs; reddish abdomen

SIZE/STAGE: Nymphs can be poppy-seed small

HABITAT: Wooded and brushy habitat

KNOWN FOR: Lyme • anaplasmosis • babesiosis • Powassan

COMMON NAMES: Deer tick, Black legged tick

AMBLYOMMA



LOOK: Long mouthparts; female lone star has white dot

SIZE/STAGE: Aggressive host-seeking ticks

HABITAT: Woodlands, brush and grass

KNOWN FOR: Ehrlichiosis • alpha-gal association • spotted fever

COMMON NAMES: Lone star tick

DERMACENTOR



LOOK: Broad body with ornate pale markings

SIZE/STAGE: Adults commonly bite people

HABITAT: Grassy and open habitats

KNOWN FOR: Rocky Mountain spotted fever • tularemia

COMMON NAMES: Rocky Mountain wood tick, American dog tick

ADDITIONAL IMPORTANT GROUP: Brown dog ticks belong to RHIPICEPHALUS—not one of the three groups shown above.

Deer tick or Blacklegged tick: the major eastern Lyme vector

MAJOR GROUP → IXODES

HOW TO RECOGNIZE IT

Male: smaller and dark across most of the back. Female: black legs and front shield contrast with a reddish-orange abdomen.

TYPICAL BEHAVIOR

Waits on low vegetation for passing hosts; nymphs and adult females commonly bite people.

UNITED STATES

Widely distributed across the eastern United States

HIGHEST LYME RISK

Northeast, mid-Atlantic and upper Midwest forested areas

ADULT MALE



ADULT FEMALE



NYMPH • 8 LEGS



LARVA • 6 LEGS



TYPICAL UNFED SIZE: adult 2–5 mm • nymph 1–2 mm • larva <1 mm

Juvenile appearance varies by species. Confirm specimens with a regional identification key.

KNOWN FOR: Lyme disease, anaplasmosis, babesiosis, hard tick relapsing fever, ehrlichiosis and Powassan virus disease.

Western blacklegged tick: the Pacific Lyme vector

MAJOR GROUP → IXODES

HOW TO RECOGNIZE IT

Male: smaller with a mostly dark back. Female: dark legs and front shield with a reddish-brown posterior abdomen.

TYPICAL BEHAVIOR

Larvae and nymphs commonly feed on lizards, birds and rodents; adults often feed on deer.

PACIFIC COAST

Found along the Pacific coast of the United States

CORE AREA

Particularly important in northern California and parts of Oregon and Washington

ADULT MALE



ADULT FEMALE



NYMPH • 8 LEGS



LARVA • 6 LEGS



TYPICAL UNFED SIZE: adult 2–5 mm • nymph 1–2 mm • larva <1 mm

Juvenile appearance varies by species. Confirm specimens with a regional identification key.

KNOWN FOR: Lyme disease, anaplasmosis and hard tick relapsing fever in parts of the western United States.

Lone star tick: aggressive and easy to recognize

MAJOR GROUP → AMBLYOMMA

HOW TO RECOGNIZE IT

Male: multiple pale markings around the body and shield.

Female: one unmistakable solitary white dot on her back.

TYPICAL BEHAVIOR

An aggressive tick that actively seeks hosts; larvae, nymphs and adults can bite people.

UNITED STATES

Widely distributed across the Northeast, South and Midwest

EXPANDING RANGE

Established populations have moved farther north with deer and habitat changes

ADULT MALE



ADULT FEMALE



NYMPH • 8 LEGS



LARVA • 6 LEGS



TYPICAL UNFED SIZE: adult 2–5 mm • nymph 1–2 mm • larva <1 mm

Juvenile appearance varies by species. Confirm specimens with a regional identification key.

KNOWN FOR: Ehrlichiosis, Heartland virus and Bourbon virus; bites are associated with STARI and alpha-gal syndrome.

American dog tick: a widespread spotted-fever vector

MAJOR GROUP → DERMACENTOR

HOW TO RECOGNIZE IT

Male: ornate shield covers nearly the entire back. Female: ornate shield covers only the front, leaving a plain brown abdomen.

TYPICAL BEHAVIOR

Common in grassy areas, trails and field edges. Highest human-bite risk is in spring and summer.

UNITED STATES

Widely distributed east of the Rocky Mountains

WESTERN RECORDS

Also occurs in limited western areas; a related species, *D. similis*, occurs farther west

ADULT MALE



ADULT FEMALE



NYMPH • 8 LEGS



LARVA • 6 LEGS



TYPICAL UNFED SIZE: adult 2–5 mm • nymph 1–2 mm • larva <1 mm

Juvenile appearance varies by species. Confirm specimens with a regional identification key.

KNOWN FOR: Rocky Mountain spotted fever and tularemia.

Rocky Mountain wood tick: a western disease vector

MAJOR GROUP → DERMACENTOR

HOW TO RECOGNIZE IT

Male: ornate shield covers nearly the entire back. Female: ornate shield is limited to the front of the reddish-brown abdomen.

TYPICAL BEHAVIOR

Adults commonly quest on vegetation in brushy foothill and mountain habitats.

WESTERN NORTH AMERICA

Rocky Mountain states and western Canada

SEASON

Human exposure is often greatest during spring and early summer

ADULT MALE



ADULT FEMALE



NYMPH • 8 LEGS



LARVA • 6 LEGS



TYPICAL UNFED SIZE: adult 2–5 mm • nymph 1–2 mm • larva <1 mm

Juvenile appearance varies by species. Confirm specimens with a regional identification key.

KNOWN FOR: Rocky Mountain spotted fever, Colorado tick fever and tularemia; also associated with tick paralysis.

Brown dog tick: adapted to homes and kennels

ADDITIONAL GROUP → RHIPICEPHALUS

HOW TO RECOGNIZE IT

Both sexes are uniformly reddish-brown. Male: shield covers nearly the full back. Female: front shield leaves a plain abdomen.

TYPICAL BEHAVIOR

Dogs are the primary host through all life stages. It can complete its life cycle indoors.

GLOBAL

Found nearly worldwide and throughout the United States

HUMAN RISK

RMSF transmission is especially important in parts of the Southwest and U.S.–Mexico border region

ADULT MALE



ADULT FEMALE



NYMPH • 8 LEGS



LARVA • 6 LEGS



TYPICAL UNFED SIZE: adult 2–5 mm • nymph 1–2 mm • larva <1 mm

Juvenile appearance varies by species. Confirm specimens with a regional identification key.

KNOWN FOR: Rocky Mountain spotted fever in parts of the southwestern United States and Mexico.

Quick reference: tick, geography and disease

Tick	Typical geography	Most recognized disease links
Blacklegged	Eastern U.S.; Northeast + upper Midwest	Lyme, anaplasmosis, babesiosis, Powassan
Western blacklegged	Pacific Coast, especially northern California	Lyme, anaplasmosis, hard tick relapsing fever
Lone star	Northeast, South and Midwest	Ehrlichiosis; STARI and alpha-gal association
American dog	Mostly east of the Rocky Mountains	Rocky Mountain spotted fever (RMSF), tularemia
Rocky Mountain wood	Rocky Mountain states and western Canada	RMSF, Colorado tick fever, tularemia
Brown dog	Worldwide; homes and kennels	RMSF in parts of the Southwest and Mexico

Remember: tick presence alone does not show whether local ticks are infected.

Avoid the habitat. Check for ticks. Remove them promptly.

PROTECT

Use an EPA-registered repellent like Summit[®] Green Armor to treat your shoes, clothes, outdoor gear and dogs as directed to repel and kill ticks.

SHOWER

Shower soon after returning indoors; dry clothes on high heat.

CHECK

Inspect your body, clothing, gear and pets after being outdoors.

REMOVE

Use Summit[®] Tick-Take[™] to safely remove attached or crawling ticks without touching them.

If fever, rash or other illness follows a tick bite, contact a healthcare professional.