



Disease/Condition	Pathogen (U.S.)	Vector (U.S.)	Symptoms
Alpha-gal syndrome	*Allergy to a sugar molecule found in red meats and meat-related products.	Lone star tick, blacklegged tick (<i>Ixodes scapularis</i> , <i>Ixodes pacificus</i> ; <i>presumptive</i>), and chiggers	Life-threatening allergic reactions, rash, hives, nausea, difficulty breathing, drop in blood pressure, dizziness, fainting, severe stomach pain
Anaplasmosis (Bacteria)	<i>Anaplasma phagocytophilum</i>	Blacklegged tick (<i>I. scapularis</i> , <i>I. pacificus</i>)	Flu-like symptoms (fever, chills, headache, fatigue, pain)
Babesiosis (Parasite)	<i>Babesia microti</i> , <i>Babesia duncani</i> , <i>Babesia divergens</i> , <i>Babesia MO-1</i>	Blacklegged tick (<i>I. scapularis</i> , <i>I. Pacificus</i>), winter tick	Fever, chills, night sweats, fatigue, headache, pain, shortness of breath, "air hunger"
Bartonellosis (aka cat-scratch disease) (Bacteria)	<i>Bartonella quintana</i> , <i>B. bacilliformis</i> , <i>B. henselae</i> , <i>B. vinsonii</i> & more...	Tick, flea, louse, sand fly, cat scratch	Low-grade fever, enlarged tender lymph nodes, severe muscle pain, pustule at site of bite/scratch, striated rash, shin bone pain, pain in soles of feet
<i>Borrelia miyamotoi</i> disease (Bacteria)	<i>Borrelia miyamotoi</i>	Blacklegged tick (<i>I. scapularis</i> , <i>I. pacificus</i>)	High fever, abdominal pain, vomiting, headache, pain, petechiae rash, recurring fevers, chills
Bourbon virus	Bourbon virus (thogotovirus)	Lone star tick (presumptive)	Fever, fatigue, rash, headache, pain, nausea, vomiting
Colorado tick fever (Virus)	Colorado tick fever virus (coltivirus)	Rocky Mountain wood tick	Flu-like symptoms, nausea, fever/symptoms may return after short period of feeling well
Ehrlichiosis (Bacteria)	<i>Ehrlichia chaffeensis</i> , <i>Ehrlichia ewingii</i> , <i>Ehrlichia muris</i>	Lone star tick, blacklegged tick (<i>I. scapularis</i> , <i>I. pacificus</i>)	Flu-like symptoms, nausea/vomiting, fatigue, swollen lymph nodes, rash
Heartland virus	Heartland virus (phlebovirus)	Lone star tick	Fever, fatigue, headache, nausea, diarrhea, pain
Lyme disease (Bacteria)	<i>Borrelia burgdorferi</i> , <i>Borrelia mayonii</i>	Blacklegged tick (<i>I. scapularis</i> , <i>I. pacificus</i>)	ACUTE: Flu-like symptoms, rash (bull's-eye or other), heart block, migrating arthritis, Bell's palsy CHRONIC: Fatigue, joint/muscle pain, cognitive impairment, sleep disturbance, psychiatric symptoms, neuropathy
Pacific coast tick fever (Bacteria)	<i>Rickettsia philipii</i>	Pacific Coast tick	Flu-like symptoms, recurring fever, eschar (dark scab at site of bite)
Rocky Mountain spotted fever (Bacteria)	<i>Rickettsia rickettsii</i>	American dog tick, brown dog tick, Rocky Mountain wood tick, Pacific Coast tick	High fever, chills, severe headache, pain, fatigue, nausea, vomiting, confusion, rash
Q-fever (Bacteria)	<i>Coxiella burnetii</i>	Brown dog tick, Rocky Mountain wood tick, lone star tick, Pacific Coast tick	Flu-like symptoms, high fever, pneumonia
Rickettsiosis (Bacteria)	<i>Rickettsia parkeri</i>	Gulf coast tick	Fever, headache, pain, spotted rash, eschar (dark scab at site of bite)
Powassan virus disease	Powassan virus (flavivirus)	Blacklegged tick, groundhog tick	Fever, headache, sore throat, nausea, vomiting, fatigue, confusion, seizures, weakness, paralysis
Southern tick-associated rash illness (STARI) (Unknown)	<i>Borrelia lonestari</i> (presumptive)	Lone star tick	Similar symptoms as Lyme disease
Tick-borne relapsing fever (Bacteria)	<i>Borrelia hermsii</i> , <i>Borrelia turicata</i> , <i>Borrelia parkeri</i>	Soft ticks, <i>Ornithodoros</i> species	High fever, abdominal pain, vomiting, headache, pain, petechiae rash, recurring fevers, chills
Tick paralysis (aka tick toxicosis) (Unknown)	Toxin in tick saliva* (presumptive)	American dog tick, Rocky Mountain wood tick	Fatigue, flaccid paralysis, tongue & facial paralysis, convulsions
Tularemia (Bacteria)	<i>Francisella tularensis</i>	American dog tick, Rocky Mountain wood tick, lone star tick, Pacific Coast tick, deer fly, infected animals	Skin ulcers, swollen lymph nodes, inflamed eyes, sore throat, pneumonia, nausea