

Canine vector-borne diseases (CVBD) overview

Disease	Ectoparasite/Vector	Pathogen	Distribution
Anaplasmosis	Europe: Castor Bean tick (<i>Ixodes ricinus</i>) USA: Deer tick (<i>Ixodes scapularis</i>)	Bacteria (<i>Anaplasma phagocytophilum</i>)	<ul style="list-style-type: none"> Widespread in temperate areas of the Northern Hemisphere Common in Northern and Central Europe and in the USA
Babesiosis	Ticks of several species, esp. Dermacentor ticks	Protozoan (<i>Babesia</i> spp.)	<ul style="list-style-type: none"> Global distribution Common in Africa, Europe, Asia, America, Oceania
Ehrlichiosis	Brown Dog tick (<i>Rhipicephalus sanguineus</i>)	Bacteria (<i>Rickettsiales</i>)	<ul style="list-style-type: none"> Widespread in tropical and temperate areas Reported from the USA, Europe (Mediterranean region) and Africa
Lyme Borreliosis (Lyme Disease)	Europe: Castor Bean tick (<i>Ixodes ricinus</i>) USA: Deer tick (<i>Ixodes scapularis</i>)	Bacteria (spirochete)	<ul style="list-style-type: none"> US: states in the North-eastern, Mid-Atlantic, Upper North-central regions, and North-western California Europe: Common in Northern, Eastern and Central Europe and Russia Occurrence also confirmed in Asia (China, Japan) and probably Australia
Leishmaniosis	Sand flies (<i>Phlebotomus</i> spp.)	Protozoan (<i>Leishmania infantum</i>)	<ul style="list-style-type: none"> In more than 100 countries, from warm temperate through subtropical to tropical climates Extremely common in the Mediterranean area and South America; also found in Africa and Asia



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Dirofilariosis (Heartworm Disease)	Mosquitoes (<i>Aedes</i> , <i>Culex</i> , <i>Anopheles</i> spp.)	Filarial nematode <i>Dirofilaria immitis</i>	<ul style="list-style-type: none"> ▪ Common in Southern Europe, USA, Canada, Australia as well as South-eastern and Eastern Asia, including Japan ▪ Europe: prevalent in Portugal, Spain, Southern France, Italy, Greece and other peri-Mediterranean countries
Subcutaneous Dirofilariosis	Mosquitoes (<i>Aedes</i> , <i>Culex</i> , <i>Anopheles</i> spp.)	Filarial nematode <i>Dirofilaria repens</i>	<ul style="list-style-type: none"> ▪ Common in Southern Europe, Middle East, Asia and Africa ▪ Europe: prevalent in Italy, Southern France, Portugal, Spain, Greece and Eastern Europe