

Arthropod-Borne Diseases

Arthropod Vector	Disease	Disease Agent	Method of Human Exposure
Arachnida			
Mite: <i>Leptotrombidium</i> sp. (red mites)	Scrub Typhus (Tsutsugamushi disease)	<i>Rickettsia tsutsugamushi</i> (bacteria, intracellular)	Bite of larval mite
Mite: <i>Liponyssoides sanguineus</i> (mouse mite)	Rickettsial pox	<i>Rickettsia akari</i> (bacteria)	Bite of mite
Tick: <i>Dermacentor</i> sp.	Tularemia	<i>Francisella tularensis</i> (Gram negative bacteria)	Bite of tick
Tick: <i>Dermacentor</i> sp. and other Ixodid ticks	Rocky Mountain Spotted Fever	<i>Rickettsia rickettsia</i> (bacteria)	Bite of tick
Tick: <i>Ornithodoros</i> sp.	Endemic Relapsing Fever	<i>Borrelia</i> sp. (bacteria, spiral shaped)	Bite of tick
Tick: <i>Ixodes</i> sp.	Babesiosis	<i>Babesia microti</i> (parasite, protozoan)	Bite of tick
Tick: <i>Ixodes</i> sp.	Lyme disease	<i>Borrelia burgdorferi</i> (bacteria, spiral shape)	Bite of tick
Tick: <i>Dermacentor variabilis</i> , <i>Amblyomma americanum</i>	Ehrlichiosis, Sennetsu fever	<i>Ehrlichia canis</i> <i>E. sennetsu</i> <i>E. chaffeensis</i> <i>E. equi</i> <i>E. phagocytophilia</i> (bacteria, intracellular)	Bite of tick
Tick: <i>Dermacentor</i> sp.	Colorado Tick Fever	CTF virus, Eyach virus, or strain S6-14-03 (Reoviridae)	Bite of tick
Tick:	Russian Spring-Summer Encephalitis, Louping III Encephalitis, Langat Encephalitis, Powassan Encephalitis, Omsk hemorrhagic fever	Russian Spring-Summer Encephalitis, Louping III Encephalitis, Langat virus, Powassan virus, Omsk hemorrhagic fever virus (Flaviviridae)	Bite of tick

Tick:	Nairobi Sheep fever, Crimean hemorrhagic fever	Nairobi sheep disease virus, Crimean-Congo hemorrhagic fever virus (Bunyaviridae)	Bite of tick
Crustacea			
Copepod: <i>Cyclops</i> sp.	Diphyllobothriasis, fish tapeworm	<i>Diphyllobothrium latum</i> (parasite, cestode, tapeworm)	Arthropod is 1st intermediate host then man swallows infected fish
Copepod: <i>Cyclops</i> sp.	Sparganosis	<i>Diphyllobothrium spirometra</i> (parasite, cestode, tapeworm)	Man swallows infected <i>Cyclops</i> .
Copepod: <i>Cyclops</i> sp.	Dracunculosis	<i>Dracunculus medinensis</i>	Man swallows infected <i>Cyclops</i> .
Crabs, crayfish: various freshwater species	Paragonimiasis	<i>Paragonimus westermani</i>	Man eats infected crustacean.
Insecta			
Lice: <i>Pediculus humanus</i>	Epidemic typhus	<i>Rickettsia prowazekii</i> (bacteria)	"Bite," contaminated by louse feces or crushing louse on skin
Lice: <i>Pediculus humanus</i>	Trench fever, bacillary angiomatosis, bacillary peliosis	<i>Bartonella quintana</i> (Gram negative bacteria)	"Bite," contaminated by louse feces or crushing louse on skin
Lice: <i>Pediculus humanus</i>	Louse-borne relapsing fever or epidemic relapsing fever	<i>Borrelia recurrentis</i> (bacteria; spiral shape)	"Bite," contaminated by louse feces or crushing louse on skin
Flea: <i>Xenopsylla cheopis</i> , and various other rodent fleas	Plague	<i>Yersinia pestis</i> (Gram negative rod shaped bacteria)	"Bite" and feces of flea
Flea: <i>Xenopsylla cheopis</i>	Murine typhus	<i>Rickettsia typhi</i> (bacteria)	"Bite" and feces of flea
Flea: <i>Xenopsylla cheopis</i> , and various other rodent fleas	Rat tapeworm infection	<i>Hymenolepsis diminuta</i> (parasite; cestode; tapeworm)	Swallowing infected flea
Flea: various species	Dog tapeworm infection, Dipylidiasis	<i>Dipylidium caninum</i> (parasite; cestode; tapeworm)	Swallowing infected flea

Bug: <i>Triatoma</i> species, <i>Panstrongylus</i> sps (Kissing assassin bug, Reduvid bug)	Chaga's disease	<i>Trypanosoma cruzi</i> (parasite; protozoan)	Rubbing infected feces on mucous membranes or skin
Beetles: flour beetle	Hymenolepsis	<i>Hymenolepsis nana</i> (parasite; tapeworm; cestode)	Swallowing infected beetle
Fly, gnat: <i>Glossina</i> sp. (tsetse fly)	African trypanosomiasis, African sleeping sickness	<i>Trypanosoma brucei rhodesiense</i> and <i>T.b. gambiense</i>	Bite of infected fly
Fly, gnat: <i>Simulium</i> sp. (black fly)	Onchocerciasis, River blindness	<i>Onchocerca volvulus</i> (parasite; round worm; nematode)	Bite of infected fly
Fly, gnat: <i>Chrysops</i> sp. (deer fly)	Tularemia	<i>Francisella tularensis</i> (Gram negative rod shaped bacteria)	Bite of infected fly
Fly, gnat: <i>Phlebotomus</i> sp., <i>Lutzomyia</i> sp. (sandflies)	Leishmaniasis	<i>Leishmania donovani</i> (Visceral, dum dum fever, kala-azar), <i>L. tropica</i> (cutaneous; oriental sore, Delphi boil), <i>L. braziliensis</i> (mucocutaneous; espundia, american leishmaniasis, chiclero ulcer) (parasite; protozoan)	Bite of infected fly
Fly, gnat: <i>Phlebotomus</i> sp. (sandfly in Peru, Ecuador and Columbia)	Bartonellosis, Oroya fever, Carrion's disease	<i>Bartonella bacilliformis</i> (Gram negative bacteria)	Bite of infected fly
Fly, gnat: <i>Chrysops</i> sp. (mango flies, deer flies)	Loiasis, Eye worm	<i>Loa loa</i> (parasite; nematode; roundworm)	Bite of infected fly
Fly, gnat: sandfly	Sandfly fever, Rift Valley fever	Sandfly fever Naples virus, Sandfly fever Sicilian virus, Rift valley fever virus(Bunyaviridae)	Bite of infected fly
Mosquito: <i>Anopheles</i> sp.	Malaria	<i>Plasmodium falciparum</i> , <i>P. malariae</i> , <i>P. vivax</i> , <i>P. ovale</i> (parasite; protozoan)	Bite of infected mosquito
Mosquito: various species	Bancroftian filariasis, filarial Elephantiasis	<i>Wuchereria bancrofti</i> (parasite; nematode; roundworm)	Bite of infected mosquito

Mosquito: various species	Malayan filariasis, filarial Elephantiasis	<i>Brugia malayi</i> (parasite; nematode; roundworm)	Bite of infected mosquito
Mosquito: various species	Dirofilariasis	<i>Dirofilaria immitis</i> (parasite; nematode; roundworm)	Bite of infected mosquito
Mosquito: <i>Aedes aegypti</i>	Yellow fever	Yellow fever virus (Flaviviridae)	Bite of infected mosquito
Mosquito: <i>Aedes</i> sp.	Dengue fever, Break Bone fever	Dengue fever virus (Flaviviridae)	Bite of infected mosquito
Mosquito: <i>Culiseta melanura</i> , <i>Coquillettidia pertubans</i> , <i>Aedes vexans</i>	Eastern Equine encephalitis	Eastern Equine Encephalitis virus (Togaviridae)	Bite of infected mosquito
Mosquito: <i>Aedes triseriatus</i>	La Crosse encephalitis	La Crosse Encephalitis virus (Bunyaviridae)	Bite of infected mosquito
Mosquito: <i>Culex</i> sp.	St. Louis encephalitis	St. Louis Encephalitis virus (Flaviviridae)	Bite of infected mosquito
Mosquito: <i>Culex</i> sp., <i>Culex tarsalis</i>	Venezuelan equine encephalitis, Western equine encephalitis	Venezuelan Equine Encephalitis virus, Western Equine Encephalitis virus (Togaviridae)	Bite of infected mosquito
Mosquito	Chikungunya forest fever	Chikungunya virus, Mayaro fever, Mucambo fever, O'Nyong-Nyong fever, Pixuna fever, Ross River fever (Togaviridae)	Bite of infected mosquito
Mosquito	fevers and encephalitis	Nile fever, Japanese encephalitis virus, West Nile fever, Zika fever, Wesselsbron fever, Kyasanur forest disease virus (Flaviviridae)	Bite of infected mosquito
Mosquito	fevers and encephalitis	Oropouche virus, Bunyamwera, Bwamba fever, Guama fever, Oropouche fever, California Encephalitis virus (Bunyaviridae)	Bite of infected mosquito
Mosquito	fevers	Chandipura fever, Piry fever (Rhabdoviridae)	Bite of infected mosquito