Common Ticks in Alameda County

Ticks are ectoparasites which feed on the blood of mammals, birds, reptiles, and amphibians. They are in the same group as spiders and mites. There are four stages (eggs, larvae, nymphs and adults) in their life cycle. Both adult and nymphal ticks have eight legs, and larval ticks have six legs. Except for eggs, all three stages require a blood meal to develop into the next stage. Larvae, nymphs and adults acquire disease bacteria by feeding on infected animals.

The Western black-legged tick, Pacific coast tick and American dog tick are the most common ticks that humans encounter outdoors in Alameda County. They are hard bodied ticks with outer shells made of chitin. A less common hard bodied tick, the Brown dog tick, can complete the entire life cycle indoors on dogs or other domestic animals. They do not travel far from the infested dog’s kennel or animal quarters. These four ticks are light beige (larvae and nymphs) to reddish or dark brown (adults) in color. In the adult stage (about 3.2mm long), different species have different markings on the dorsal (top) shell. Both nymphs (2 mm) and larvae (1mm) are tiny and very difficult to spot on the human body and clothing.

Western black-legged tick (*Ixodes pacificus*)

The western black-legged tick is reddish-brown and can easily be distinguished from other ticks due to its lack of white markings on the dorsal shell. They are the main vectors of Lyme disease, Anaplasmosis, Babesiosis, and *Borrelia miyamotoi*, a relapsing fever.

The adults are about 3 mm in length and prefer living in the wooded areas with oaks, redwood and sycamore trees, as well as in the open grasslands of Alameda County. The nymphs are commonly found under oak trees in their leaf litter. They are present year round in Alameda County but may be more prevalent in certain seasons depending on their life stage. The adults will feed on the blood of large mammals such as deer, dogs, coyotes, horses, and humans. The larval and nymphal stages will feed on blood of lizards and small rodents.

Pacific coast tick (*Dermacentor occidentalis*)

The Pacific coast tick is very common in Alameda County. They can be found in the same areas as the western black-legged tick. They are also active year round, with adults being most prevalent from April to June, and the nymphs from May to August. They are major vectors of Pacific coast fever, Rocky Mountain spotted fever and Tularemia. The adults prefer feeding on large mammals including horses, deer, cattle, and humans. The nymphs will feed rodents and small mammals.
American dog tick (*Dermacentor variabilis*)

The American dog tick prefers open areas such as grasslands and scrublands with well used walking trails. They will feed on a large variety of mammals including most wildlife found in Alameda County. Adults are active from spring to fall months and in many areas will be found in large numbers. The American dog tick is an important vector of Rocky Mountain spotted fever and Tularemia.

Brown dog tick (*Rhipicephalus sanguineus*)

The Brown dog tick is found around human dwellings, dog kennels, and animal pens. This tick can complete its entire life cycle in only three months within the infested dwelling or kennel. Except eggs, all other three life stages may transmit Rocky Mountain spotted fever to dogs and humans. Controlling this tick may be very difficult. Requires treating the pets, house, and yard.

The adults are found year round and will survive 18 months without feeding. The adults prefer feeding on dogs but will feed on mammals and humans. The nymphs and larvae when engorged will hide within the house under furniture and rugs requiring thorough cleaning when trying to control an infestation.