

## By Dr. Armann

Spring sports have begun and while I was watching my daughter play lacrosse I noticed a tick climbing up my leg. I was sitting on the grass field at a local high school

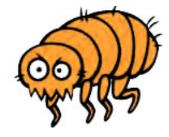
not on a hiking trail or the county park where you would expect to see a tick. As a matter of fact we can find ticks, fleas, and mosquitoes anywhere there is vegetation, water and/or animals.

The mild winter we had this year has created an environment that benefits the populations of many pesky insects. Since many insects didn't die off this

winter, we will be at an increased risk of contracting some serious diseases carried by a noted few insects; mosquitoes, ticks and fleas.

Mosquitoes carry many diseases, some found here in California, of which West Nile virus(WNV) is the most prevalent. There were a total of 527 cases of WNV here in California several were here in Santa Clara County. This disease can cause neuroinvasive disease like encephalitis which is inflammation and swelling of the brain.

Seven different tick-borne diseases(TBD) have been reported in California. Lyme disease is the most commonly reported TBD here in Santa Clara County. Lyme disease can appear as a mild flu-like illness with



an expanding red rash. If untreated Lyme disease becomes a chronic possibly debilitating disease. If that wasn't bad enough a new TBD, without a name, caused by Borrelia

miyamotoi bacteria that has been found here the Bay Area. It also causes flu like symptoms without a rash.

Flea bites are more of a nuisance than anything, but beware fleas can carry disease. Of the diseases carried by fleas, two are seen here in California: plague and typhus fever. There was one case of typhus reported in Santa Clara County in 2012.



What works and what doesn't work to protect us from these disease carrying insects and be safe for the environment and ourselves? The electric "bug zapper"

> is a safe way to eliminate flying insects outdoors. Citronella products are not very effective and the smoke is hazardous to our health. Using dryer sheets or eating certain things like herbs, spices, garlic, and vitamin B may not work reliably. Most herbal oils, skin lotions, "natural" plant extracts mixed in oils and homeopathic approaches work for 20 minutes or less. Insect repellent

that contains DEET is also an effective product. If you are using any product on children and/or infants review the product safety information and check for an EPA safety label. Always follow the product directions when applying both sunscreen and insect repellent.

Remember to apply the sunscreen first allowing it absorbed into the skin apply the repellent. repellent can be applied clothing and skin. Apply

sunscreen as needed and only

to be then Insect to both

reapply

repellent when insects start to 'bug' you. Products containing lemon of eucalyptus and picaridin are also effective. Insect repellents containing permethrim should only be applied to clothing. Lemon of eucalyptus should not be used on children under three years old.

Wear light colored clothing, long sleeves and tuck pants into boots or socks, also tuck your shirt in. Thoroughly check yourself and children for insects or their bites. For more information please go to my website: www.kjkidmd.com.

Finally, the tick on my leg was just a wood tick and harmless.