

## THE SMALLEST VECTORS CAN CAUSE GREAT PROBLEMS

Did you know that mosquitos kill more people than any other creature on Earth? It has been said that knowledge is power and in the case of mosquito-borne illnesses this information can save your life. What do Dengue, Chikungunya, West Nile, Equine Encephalitis and Zika Viruses have in common? These are tropical mosquito borne viruses. Since 2017 the Zika Virus has spread globally. The Zika virus is so named because it is believed to have originated in the Zika forest of Uganda in Africa and was first reported in the 1940's. Once a person is infected they become a host for up to seven days and if a mosquito bites them, the mosquito can transmit the disease to another person. Mosquito-borne illnesses, including malaria, cause nearly 7 million cases and 1 million deaths each year.

The leading spokesman and educator about Zika virus since 2017 has been Dr. Anthony Fauci (yes, the same Fauci that we all know from COVID). Wait, there's more! Dr. Fauci himself is recovering from West Nile Virus infection that he believes he caught in his backyard, in the D.C. metropolitan area.

All the above-mentioned viruses, including Zika, are transmitted by the bite of a mosquito, or human saliva, blood transfusion or sexual transmission. Blood banks in the United States are safe and do not accept, per FDA guidelines, blood donations from people who have traveled to areas with active transmission of Zika in the last 28 days. There is currently no cure or vaccine. Antibiotics are not effective because it is a virus not a bacterial infection. Once infected with the Zika virus the symptoms begin within 2-5 days. It is important to note that some cases are mild and some experience no symptoms. In the beginning there is a fever, rash, joint pain and red in the white of the eyes. It is important to treat only with acetaminophen (Tylenol) as this is an inflammatory disease made worse by such medication as Aspirin. The second stage for the disease includes headaches, aching behind the eyes and vomiting. Bed rest is recommended and hydration. A diagnosis can be made by a physician with a blood titer.

Complications can arise for pregnant women who contact Zika. It is believed the disease passes to the unborn children. In Brazil, studies have confirmed that children born to infected mothers have birth defects such as microcephaly. The CDC is working to investigate the link in Brazil. In addition to pregnancy it appears the virus can begin to ravage the nervous systems producing crippling diseases in adults. There have been cases of complications with Guillain-Barré Syndrome, a type of paralysis. In some adults it causes a form of crippling arthritic symptoms.

The mosquito that carries this disease is a common one in Florida known as the Tiger mosquito. Once these mosquitos became infected they become aggressive daytime biters. They can also bite at night.

This is uncommon for these vectors. Because, as most of us know, they feed at dusk or dawn. They have no issues with following you inside of your home where other mosquitoes shun the temperature difference. The Okaloosa mosquito control program monitors 12 trap sites across the county in locations of known heavy mosquito activity. The Tiger mosquito is rare in the winter time but begin to hatch in spring, all through the summer and into fall.

What can be done? Okaloosa County has an aggressive campaign to destroy mosquitos through spray. If a case is detected in Okaloosa, additional emergency state funds are available to combat the spread. Government alone cannot keep us from a massive outbreak. All citizens must partner with the County in this fight. Mosquitos can breed in water as small as the amount found in fallen Magnolia leaves. This is important because no leaf must be left unturned in your yards. Pots, gutters, birdbaths must be inspected for water which are prime breeding grounds. It only takes a few days for larvae to hatch once the eggs are laid in standing water. The Tiger mosquitos do not travel far in their lifespan so truly most hatch and live within a mile of your property. So wear protective clothing and use an insect repellant product with an EPA-registered insect repellent. If you use sunscreen, apply sunscreen before applying insect repellent. Special clothing is made that has insect repellent as part of the fabric for outdoor protection. Wear long-sleeved shirts and pants. Make sure your windows and door screens are in good repair. If you contact this disease you can spread it to a loved one with an exchange of bodily fluid.

To date, in 2024, there have been only travel related cases of Dengue and Chikungunya. Those individuals isolated themselves until they were no longer capable of transmitting the disease.

Mosquitos are a year-round problem. In Florida, and especially in Okaloosa, we are actually fortunate that we have such a well-managed Mosquito control program. Working together as a community with our County we can mitigate the inevitable spread of this disease in our area with education and a willingness to understand the historical fight we are in against an insect that continues to reinvent misery under different names.

For more information about Okaloosa County's program, please visit our website at <u>https://myokaloosa.com/pw/environmental/mosquito-control</u>. Included on the website is the spray schedule, educational materials and links to additional information. The next time you see a spray truck on your street, give thanks that we have such a robust mosquito control program in our county.

It is an honor and privilege to serve as your commissioner.

My Sincere Thanks,

Caroly le. Ketchel

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