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## Mosquitoes

Mosquitoes are a diverse group of flies that are found worldwide from the tropics to the Arctic regions of the world. New mosquito species are continually being introduced into the United States, with a total of 85 species currently found in Texas.

Mosquitoes are considered one of the biggest medical threats to humans, since they transmit diseases that kill millions of humans worldwide. Mosquitoes are capable of transmitting diseases, such as West Nile Virus, Eastern Equine Encephalitis, and Yellow Fever.

Thankfully, there are ways to prevent mosquitoes from breeding and biting humans. The number one way to reduce mosquito populations in your yard is **source reduction**. Mosquitoes are capable of breeding in any area that contains water such as buckets, bird baths, pet dishes, ponds, boat covers, irrigation systems, and French drains. Mosquitoes need as little as a bottle cap full of water to complete their lifecycle, so all areas where water collects needs to be emptied or changed weekly. If standing water is eliminated in your backyard, then the overall mosquito population in your area will be reduced.

There are many ways to prevent mosquitoes from biting humans: 1) Avoid wearing dark colors, since mosquitoes rely on visual cues to locate hosts. 2) Avoid exercising or yard work in the heat of the day. Since humans produce more carbon dioxide when they are hot, mosquitoes have a greater chance of locating you as a potential host. Mosquitoes are also attracted to perspiration, not only the chemical composition, but also the increase of humidity around the body. 3) Avoid wearing fruity or floral fragrances in perfumes, hair products, or sunscreens, since these scents are more attractive to mosquitoes.

A number of repellents can be applied to the skin in order to repel mosquitoes and prevent them from biting. N,N-diethyl meta-toluamide, also known as DEET, has been an effective repellent to mosquitoes for around 50 years. There are also other mosquito repellents on the market such as picaridin, oil of lemon eucalyptus, oil of eucalyptus, and soybean oil-based repellents. Picaridin is a synthetic repellent marketed by S.C. Johnson and sold under the trade name Cutter® Advanced™. The natural product oil of lemon eucalyptus is sold under the trade name Repel® Lemon Eucalyptus. Oil of eucalyptus is sold under the trade name OFF Botanicals™ insect repellent and other commercially

available products. Soybean oil-based repellent is sold under the trade name Bite Blocker™.



**Asian tiger mosquito,**  
*Aedes albopictus* (Skuse)  
(Diptera: Culicidae).  
Photo by Bart Drees, Ph.D.  
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