



University of West Florida Mosquito Control Program

The University of West Florida recognizes the concern regarding the mosquito-borne West Nile Virus and is conducting a proactive awareness and treatment campaign to minimize mosquito populations on campus, and to inform faculty, staff and students how to minimize contact. West Nile is typically spread by a species of mosquito active during the early morning and evening hours, and primarily carried in birds. Mosquitoes that feed on infected birds may transmit the virus to humans. However, of the many viruses transmitted by mosquito, West Nile is one of the least virulent, and chances of contracting the virus are extremely remote. Minimizing contact with mosquitoes is the best method of prevention.

Mosquito fogging and other insecticide treatments are often employed in populated areas; however, the effectiveness of this method remains controversial for repetitive and long-term applications. The University of West Florida Campus is surrounded by marshlands and woodlands that make insecticide treatment difficult and impractical. Fogging and chemical larvicide treatment is also non-selective, killing many beneficial insects and mosquito predators, and presents other unfavorable ecological consequences. In consultation with several Biology faculty with expertise in this area, the University feels that an educational program targeting natural elimination methods, with minimal and localized pesticide application, is in the best interest of the campus community. The following efforts will be enacted:

1. Wet retention ponds will be treated with *Bacillus thuringiensis israeliensis* (Mosquito granules) that target the larva. Source reduction of the larva is proven to be a better control method than attacking adult mosquitoes.
2. Larval-eating fish (Gambusia) will be added to wet retention ponds and other locations where applicable.
3. Over the counter pre-mixed Ultra Low Volume sprays (i.e. Yard Guard, or equivalent, designed to repel insects from isolated areas for short durations) will be used/available for special outdoor events and available at the Resident Hall desks and University Commons Administration for their use and application.
4. Students and staff involvement is requested by eliminating all sources of residual water (e.g. pet food bowls, saucers, trash cans, beverage containers, etc.) or reporting areas that retain water for more than 24 hours. Facilities Services personnel will respond to eliminate standing water where possible.
5. Encourage the use of insect repellants with DEET when outside activities are planned. Pump spray (non-aerosol) products with low DEET concentrations are suggested. (Note: There have been some safety concerns over the last few years with the use of DEET. However, DEET is proven to repel potentially disease-carrying insects and the latest information is that DEET is safe if used according to the label directions. Small pump spray containers will be made available. Additional information can be found at:
<http://www.cdc.gov/ncidod/dvbid/westnile/q&a.htm#repellent>
6. Repellents will be made available to Resident Hall students and staff who wish to use them.

7. Limit or avoid outside activities between dusk and dawn when mosquitoes are most active.
8. Wear long sleeves and long pants when possible if you must be out side during these periods.
9. Future projects may include Purple Martin Houses placed at selected areas of campus.

These efforts will require everyone's cooperation to help reduce breeding areas throughout the populated areas of campus. For additional information, you may contact the Department of Environmental Health and Safety at Ext. 2525, or e-mail probinso@uwf.edu.

Additional Information on

WEST NILE VIRUS



About the Virus, the Disease, and Its Spread

West Nile virus is spread by the bite of an infected mosquito, and can infect people, horses, many types of birds, and some other animals. Mosquitoes become infected when they feed on infected birds, which may circulate the virus in their blood for a few days. Infected mosquitoes can then transmit West Nile virus to humans and animals while biting to take blood. The virus is located in the mosquito's salivary glands. During blood feeding, the virus may be injected into the animal or human, where it may multiply, possibly causing illness.

Most people who become infected with West Nile virus will have either no symptoms or only mild ones. Even in areas where the virus is circulating, very few mosquitoes are infected with the virus. Even if the mosquito is infected, less than 1% of people who get bitten and become infected will get severely ill. The chances you will become severely ill from any one mosquito bite are extremely small.

On rare occasions, West Nile virus infection can result in a severe and sometimes fatal illness known as West Nile encephalitis (an inflammation of the brain). The risk of severe disease is higher for persons 50 years of age and older. There is no evidence to suggest that West Nile virus can be spread from person to person or from animal to person.

Using Insect Repellents Safely

EPA recommends the following precautions when using insect repellents:

- Apply repellents only to exposed skin and/or clothing (as directed on the product label). Do not use under clothing.
- Never use repellents over cuts, wounds, or irritated skin.
- Do not apply to eyes and mouth, and apply sparingly around ears. When using sprays do not spray directly onto face; spray on hands first and then apply to face.
- Do not allow children to handle the products, and do not apply to children's hands. When using on children, apply to your own hands and then put it on the child.
- Do not spray in enclosed areas. Avoid breathing a repellent spray, and do not use it near food.
- Use just enough repellent to cover exposed skin and/or clothing. Heavy application and saturation is generally unnecessary for effectiveness; if biting insects do not respond to a thin film of repellent, then apply a bit more.
- After returning indoors, wash treated skin with soap and water or bathe. This is particularly important when repellents are used repeatedly in a day or on consecutive days. Also, wash treated clothing before wearing it again. If you suspect that you or your child are reacting to an insect repellent, discontinue use, wash treated skin, and then call your local poison control center. If/when you go to a doctor, take the repellent with you.

What can I do to reduce my risk of becoming infected with West Nile virus?

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- Stay indoors at dawn, dusk, and in the early evening.
 - Wear long-sleeved shirts and long pants whenever you are outdoors.
 - Spray clothing with repellents containing permethrin or DEET since mosquitoes may bite through thin clothing.
 - Apply insect repellent sparingly to exposed skin. An effective repellent will contain 35% DEET (N,N-diethyl-meta-toluamide). DEET in high concentrations (greater than 35%) provides no additional protection.
 - Repellents may irritate the eyes and mouth, so avoid applying repellent to the hands of children.
 - *Whenever you use an insecticide or insect repellent, be sure to read and follow the manufacturer's DIRECTIONS FOR USE, as printed on the product.*
 - Install or repair window and door screens so that mosquitoes cannot get indoors.
 - Note: Vitamin B and "ultrasonic" devices are NOT effective in preventing mosquito bites.