

# BUZZ OFF!

## 4 WAYS TO PREVENT MOSQUITO BITES

West Nile virus. Chikungunya. Dengue fever. Zika. These mosquito-transmitted diseases are four good reasons to make repelling mosquitoes a priority. Below are some tips, based on the four Ds, to reduce your chance of that next mosquito bite.

**Sonja Swiger**, Extension Medical/Veterinary Entomologist  
**Mike Merchant**, Extension Urban Entomologist  
The Texas A&M University System



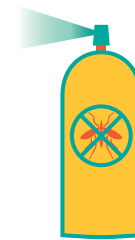
**Drain or dump** any standing water around your home: Clean out leaf-filled gutters; dump bird baths and flower pot drain dishes every week; and store buckets, toys, wading pools, wagons, and wheel barrows so they do not catch and hold water; and screen rain barrels and cisterns to keep out mosquitoes.



**Day, dusk and dark.** Some kinds of mosquitoes are active at any time, day or night. West Nile virus mosquitoes are active from dusk to dawn; but mosquitoes that carry Zika and chikungunya are active in shady areas all day. Mosquitoes can bite anytime the temperature rises above 55°F.



**Dress** to discourage mosquito bites. When you'll be outdoors for an extended period, wear long pants and loose fitting, long-sleeve shirts. Fabrics with tight weave usually work better than knits or other loosely woven materials.



**DEET** or another mosquito repellent recommended by the Centers for Disease Control and Prevention (CDC) is your best defense if you must be outdoors when mosquitoes are active.

## Choose the right repellent

Based on extensive testing, the CDC recommends using insect repellents that contain one of the four best active ingredients: DEET, IR3535, picaridin, or oil of lemon eucalyptus (para-menthane-3,8-diol).

If you want something natural that works, choose oil of lemon eucalyptus. Other “natural” insect repellents, which often contain essential oils like lavender and citronella, are not scientifically shown to be effective.

All of the products on the CDC list will fully prevent mosquitoes from biting for known lengths of time.

## Protect your children

Remember that the potential harm to adults or children using insect repellents is much less than that from contracting Zika or another mosquito-borne disease. When applying repellent to children, take these steps:

- Follow the label directions carefully and don't over apply.
- Do not apply any insect repellent to babies under 2 months old, and avoid oil of lemon eucalyptus (para-menthane-3,8-diol) for children under 3 years old.
- Do not apply an insect repellent directly to the face or hands of children; apply it first on adult hands and wipe it on the child.
- Wash children's hands and faces before they eat and after they return indoors.

For help in choosing the best repellent, see the **Environmental Protection Agency's Repellent Finder** at <https://www.epa.gov/insect-repellents/find-insect-repellent-right-you>



**Texas A&M AgriLife Extension Service**

*AgriLifeExtension.tamu.edu*

More Extension publications can be found at [AgriLifeBookstore.org](http://AgriLifeBookstore.org)

The Texas A&M AgriLife Extension Service provides equal access in its programs, activities, education, and employment, without regard to race, color, sex, religion, national origin, disability, age, genetic information, veteran status, sexual orientation, or gender identity.

The Texas A&M University System, U.S. Department of Agriculture, and the County Commissioners Courts of Texas Cooperating.