



## Public Education

Education messages should be targeted to at-risk populations (e.g., emphasize high risk of St. Louis encephalitis virus (SLEV) and West Nile virus (WNV) illness for homeless and the elderly) in low-literacy forms and in languages appropriate to the local population. Media should be used, including radio, newspaper, and television public service announcements.

The Florida Department of Health (DOH) Environmental Public Health Tracking Program has created census tract-level maps designed to identify at-risk populations. Previous work on local dengue virus transmission in Key West identified several variables that put an individual at increased risk of not receiving prevention messaging, including populations that were non-white, non-English speaking at home, and had low socioeconomic status.<sup>1</sup> The current risk maps combine these variables with women of childbearing age (relevant for Zika virus messaging) to develop a composite index value of risk. These maps can help to drive county health department (CHD) outreach and education activities: <http://hermes.freac.fsu.edu/che/zika/>.

People can protect themselves from mosquito bites (and therefore arboviruses) by the following:

### **DRAIN standing water to stop mosquitoes from multiplying**

- Drain water from garbage cans, house gutters, buckets, pool covers, coolers, toys, flower pots or any other containers where sprinkler or rain water has collected.
- Discard old tires, drums, bottles, cans, pots and pans, broken appliances and other items that aren't being used.
- Empty and clean birdbaths and pet water bowls at least once or twice a week.
- Protect boats and vehicles from rain with tarps that don't accumulate water.
- Maintain swimming pools in good condition and appropriately chlorinated. Empty plastic swimming pools when not in use.

### **COVER skin with clothing or repellent**

- CLOTHING – Wear shoes, socks, and long pants and long sleeves. This type of protection may be necessary for people who must work in areas where mosquitoes are present.
- REPELLENT – Apply mosquito repellent to bare skin and clothing.
  - Always use repellents according to the label. Repellents with DEET, picaridin, oil of lemon eucalyptus, para-methane-diol, 2-undecanone, and IR3535 are effective. Some repellents are not suitable for children. The label will indicate the age range for which the repellent is appropriate. Repellents should not be applied to the hands of children. Adults should apply repellent first to their own hands and then transfer it to the child's skin and clothing. It is not recommended to use DEET on children less than 2 months old. Instead, infants should be kept indoors or mosquito netting used over carriers when mosquitoes are present. According to the CDC, mosquito repellents containing oil of lemon eucalyptus should not be used on children under the age of 3 years.

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<sup>1</sup>Matthias, J, Zielinski-Gutierrez, EC, Tisch, DJ, et al. 2014. Evaluating Public Housing Residents for Knowledge, Attitudes, and Practices Following Dengue Prevention Outreach in Key West, Florida. 514(11): doi: <https://doi.org/10.1089/vbz.2014.1664>.

- Use mosquito netting to protect children younger than 2 months old.

## **COVER doors and windows with screens to keep mosquitoes out of your house**

- Repair broken screening on windows, doors, porches, and patios. The ordinary window screen with 16x16 or 14x18 meshes to the inch will keep out most mosquitoes. Frequently, mosquitoes follow people into buildings or enter on the host. For this reason, screen doors should open outward and have automatic closing devices. Residual insecticide applications, on and around screen doors, give added protection.

The goals of public education are to inform the public about personal protection measures (described above), provide information, and prevent panic. CHDs, in coordination with the county mosquito control programs, may:

- Issue advisories to minimize outside activities for citizens of affected counties (e.g., activities such as camping, evening and nighttime fishing, etc., are ill-advised). Sample advisories and alerts are at the end of this chapter.
- Educate the public about the nature of the public health threat that exists and the level of risk involved (including age-specific risk or risk to certain groups).
- For Eastern equine encephalitis virus, attempt to gain immediate control of infected adult mosquito populations by use of insecticides applied by ground or aerial applications, as appropriate. Implementation of intensified larviciding programs to reduce future adult populations and elimination of mosquito breeding areas, where applicable, may also be necessary.
- Educate the public about the difficulty in controlling *Cx. nigripalpus*, the main vector for SLEV and WNV. The species has a wide range of larval habitats and the adults are able to fly several miles.

Individuals traveling to locations where mosquitoes are active should take mosquito bite precautions while traveling. In some cases, travelers can be asymptotically infected, but still be infectious to biting mosquitoes. Travelers can protect family members and prevent infection of local mosquitoes by avoiding mosquito bites for at least three weeks following return home.

The CDC's travel website provides information about diseases, vaccination requirements, and disease prevention. Information is available by destination as well by disease. Links on how to find travel clinic locations are also provided. More information for travelers can be found at the CDC website: [wwwnc.cdc.gov/travel/](http://wwwnc.cdc.gov/travel/).

The *Yellow Book* is another good resource for travel health information and is published every two years by the CDC: [wwwnc.cdc.gov/travel/page/yellowbook-home](http://wwwnc.cdc.gov/travel/page/yellowbook-home).

Health travel notices and alerts are important sources of information on current health issues related to specific destinations: [wwwnc.cdc.gov/travel/notices](http://wwwnc.cdc.gov/travel/notices).

Sample press releases, frequently asked questions, and other educational documents are available in the [List of Appendices](#). Additional educational material is available at: [www.floridahealth.gov/%5C/diseases-and-conditions/mosquito-borne-diseases/educational-materials.html](http://www.floridahealth.gov/%5C/diseases-and-conditions/mosquito-borne-diseases/educational-materials.html).

For CDC's latest repellent guidelines, see [www.cdc.gov/westnile/faq/repellent.html](http://www.cdc.gov/westnile/faq/repellent.html).  
A repellent frequently asked questions document can also be found in the [List of Appendices](#).

For more information on choosing repellent, use the EPA search tool at:  
<http://cfpub.epa.gov/oppref/insect/#searchform>.

For more information on the use of insecticides, please visit:  
[http://mosquito.ifas.ufl.edu/Mosquito\\_Management.htm](http://mosquito.ifas.ufl.edu/Mosquito_Management.htm) and  
<https://fmel.ifas.ufl.edu/fmel---gen---info---v3/fmc-white-paper/>.

For more information on mosquito-borne disease prevention, please visit the following website:  
[www.floridahealth.gov/%5C/diseases-and-conditions/mosquito-borne-diseases/prevention.html](http://www.floridahealth.gov/%5C/diseases-and-conditions/mosquito-borne-diseases/prevention.html).