

MOSQUITO CONTROL:

Stopping the Spread of Zika Virus and other Mosquito-Borne Illnesses

DHEC urges local governments to develop and maintain local integrated mosquito management programs that protect the public health from the spread of mosquito-borne illnesses. That should include reviewing, updating or creating local ordinances designed to help mosquito control programs reduce or treat standing water that can provide breeding sites for mosquitoes. DHEC does not provide mosquito control services; that is the responsibility of local governments. As the state's public health department, DHEC's role is to help identify and track the spread of mosquito-borne diseases. It is critical that we all work together to prepare for and prevent the spread of such illnesses.

Given that local jurisdictions have varying levels of available resources and capabilities, not all counties can, or will, achieve total preparedness. Taking into consideration available resources and unique needs of each jurisdiction, leaders should identify risks in their communities in order to achieve optimal and reasonable levels of preparedness. Even a minimal program focusing on eliminating mosquito habitats and educating people about ways to prevent mosquito breeding and avoid bites can be a worthwhile undertaking.

Circumstances change when a travel-related or sexually transmitted human case of Zika virus is identified in your county. At that point, it is imperative that action be taken to:

- **Prevent local mosquitoes** from biting that individual, then spreading the disease by biting others. Adulticiding, larviciding, source reduction and public health education activities should be conducted simultaneously or as near together as possible.
- **Protect the confidentiality** of the person with suspected/confirmed Zika virus disease.
- **Perform adulticiding** for at least **2 weeks** (the approximate survival time of an infected mosquito), with spraying missions occurring intermittently according to the pesticide label instructions, within a minimum **500-yard radius** around the Zika virus case site.
- **Perform public health education** within a **165-yard radius**. Utilize educational materials that encourage the public to continually dispose of water-holding containers to eliminate larval habitats and perform personal protection measures. Educate the public to protect themselves from Zika virus exposure from mosquito bites by using an EPA-approved mosquito repellent, wearing long-sleeved shirts and long pants when outdoors and making sure there are screens over windows and doors to keep mosquitoes outside. Zika is also sexually transmitted, so personal protection should be considered.
- **Perform mosquito surveillance**, including trapping, and larval control activities for a minimum of **2 weeks**, with visits occurring every **5 to 7 days**, within a minimum **165-yard radius** of the Zika case site. Systematic searches for immature mosquito or larval stages by searching for water-holding containers near human habitation should be performed. Discard or turn over water-filled containers, or use larvicide in containers, including storm drains, which cannot be dumped. Continue source reduction and larviciding for **45 days** if *Aedes aegypti* or *Aedes albopictus* is still found, assuming no further cases are identified.



Additional information and educational materials are available on the DHEC website: www.scdhec.gov/zika and on the CDC website: www.cdc.gov/zika. Specific questions related to mosquito spraying may be directed to Dr. Chris Evans, DHEC Entomologist, at: evanscl@dhec.sc.gov or (803) 896-3802.

