



# Don't Bail, Repel!

## What works...

### PERSONAL PROTECTION

#### INSECT REPELLENTS

When outdoors, use an insect repellent containing the active ingredient DEET, Picaridin, oil of lemon eucalyptus or IR3535 to reduce exposure to mosquito bites. Always apply as directed on the label. Do not allow young children to apply repellent to themselves; have an adult do it for them.

#### DEET

DEET-containing products are the most effective mosquito repellents available. DEET is not recommended for use on children under 2 months of age. Always apply as directed on the label.

#### PICARIDIN

Picaridin is also known around the world as KBR3023 or Bayrepel. It is an effective alternative to DEET that can provide long lasting protection. Always apply as directed on the label.

#### OIL OF LEMON EUCALYPTUS (OLE)

Oil of Lemon Eucalyptus (OLE) is the only plant-based insect repellent recommended by the Centers for Disease Control and Prevention (CDC) for protection against mosquitoes. OLE is derived from the leaves of the *Eucalyptus citriodora* tree, a renewable natural resource, and has natural repellent qualities. According to the label, OLE products should NOT be used on CHILDREN UNDER 3 YEARS OF AGE. Always apply as directed on the label.

#### IR3535

IR3535 is also known as Merk 3535, is considered a biopesticide (made from natural materials) and is effective against mosquitoes. Always apply as directed on the label.

#### SUNSCREEN AND REPELLENTS

Repellents and sunscreens can both be used at the same time. It is recommended that sunscreen is applied first and then repellent. Using a product that combines sunscreen with a repellent is not recommended. In most instances, insect repellents do not need to be reapplied as often as sunscreens.

Always apply both products as directed on the label.



# PROPERTY MANAGEMENT

## SOURCE REDUCTION

Check your property for standing water sources and eliminate them when possible.

- Keep rain gutters clear and draining.
- Keep lawn waste out of the storm drains and look for trouble spots on the ground that may collect water. Fill in low areas where water collects.
- Remove or empty containers that hold water such as a trash can lid, barbecue pit, lawn chair, hanging planter, tires, or wheelbarrow. Bird baths and pet bowls should be changed twice weekly.
- Seal cracks or gaps and fix or replace screens in doors and windows where mosquitoes can enter.

## NATURAL PREDATORS

Predators of mosquito larvae and pupae include many types of fish, insects, some beetle adults and larvae, nymphs and adults of many true water bugs and some mosquito larvae.

## LARVICIDING

Larvicides are pesticides that are applied to standing water to kill mosquito larvae before they emerge as flying adults. They are available at home-and-garden, home improvement, pet and grocery stores and are available as granules and dunks. You should survey your property and apply only to areas where standing water cannot be eliminated. When applied according to label instructions, most larvicides are not harmful to birds, humans or other animals. You should always follow safety precautions when applying larvicides.

## FOGGERS AND BARRIER SPRAYS

These products work well in small areas and work by releasing a fine mist or fog into the air killing adult mosquitoes in the area treated. Their effects are only temporary, lasting from 4 to 6 hours. Avoid spraying when high winds are present to prevent over drift.

# MOSQUITO TRAPS

## ELECTRIC

These traps emit small amounts of carbon dioxide (CO<sub>2</sub>) that mimic breathing patterns of humans and animals. Mosquitoes are attracted to the CO<sub>2</sub> that is released. A small vacuum forces mosquitoes into the trap; they are killed after passing through an electrocution grid.

## PROPANE

These traps work by generating CO<sub>2</sub> and heat by burning propane. In addition, some propane traps use Octenol, a chemical designed to mimic livestock breathing patterns, as an attractant. When a mosquito approaches the trap, it is forced into the trap by a vacuum. The mosquitoes remain trapped until they dehydrate and ultimately die.



[www.hcphtx.org](http://www.hcphtx.org)

**HCPH Mosquito Control**  
3330 Old Spanish Trail  
Houston, Texas 77021  
Phone: (713) 440-4800