

Mosquito Control

The Zika virus, West Nile virus, and other mosquito-borne diseases are recognized public health threats. A number of strategies to protect yourself and your family can be considered.

SPRAYING

- Spray programs are often **ineffective** and pose some risks to humans, pets, wildlife and particularly to bees!
- In some parts of the country the following chemicals are frequently used for mosquito control and may have negative health effects: *permethrin*, *malathion*, *naled*, *phenothrin* (*sumithrin*), and *pyrethrin*.
- It is better to **target the larvae** than the adult mosquito (a flying object).

YARD MODIFICATIONS

Check yard and **eliminate mosquito-breeding habitats** such as clogged rain gutters, empty garden containers, wading pools, pool covers, etc. Water in bird baths should be changed frequently.

If the source cannot be eliminated, then using a product which contains *Bacillus thuringiensis var. israelensis* (*Bti*), like **mosquito “dunks”**, can be used to reduce mosquito larvae in small areas. Do not use in wetlands.

Certain plants such as basil, lavender, rosemary, lemongrass, lemon thyme, mint, rosemary, lemon balm, marigolds and others have natural mosquito repelling properties. Growing these either in the ground or in pots near porches or walkways will provide some repellency.

PERSONAL PROTECTION

For personal protection Beyond Pesticides recommends the following as safe mosquito repellants:

- **Oil of Lemon Eucalyptus** (OLE). Also recommended by the CDC.
- **Picaridin** (Avon Skin So Soft Bug Guard Plus Picaridin, and Sawyer Premium 29% Picaridin). Also recommended by the CDC.
- **IR3535** (Avon Skin So Soft Bug Guard Plus IE 3535, Expedition, Coleman Skin So Soft.)
- **Essential Oils:** soybean oil, citronella oil, and other essential oils including lemongrass oil, geraniol oil, peppermint oil, clove oil etc.

NOTE: Beyond Pesticides does **NOT** recommend **pesticide impregnated clothing** or **DEET** due to health concerns.

OTHERS:

- **Citronella** products made from *Cymbopogon nardus* are widely used for natural mosquito control, either in candles or as skin protective. Candles are effective only if used in a confined or small space. **NOTE:** The “mosquito plant,” *Pelargonium citrosa*, does not have mosquito repelling properties as some believe.
- Commercial **garlic sprays** are available which can be used in the yard. These sprays will also give some protection against the black-legged tick.
- Installing **bat houses**. Bats can eat 500-1000 mosquitoes in one hour!

