# WestNileVirus YellowFever **Mosquitoes**

ZikaVirus



www.AsthmaCenter.com

<u>9 Office Locations!</u> <u>NJ & PA</u>

**Subscribe** 

BuzzBytes Malaria

f g log

### Which mosquitoes bite?

Female mosquitoes bite.

### When do mosquitoes bite?

Mosquitoes look for human hosts most commonly during the **early evening hours** which correspond with the time of day during the summer when people are most active outdoors: barbecuing, watching sporting events, gardening, camping, or exercising.

Reminder: Mosquitoes can bite at any time. We are susceptible to mosquito bites at *all hours, and during the summer months, prevention should be considered for all outdoor activities!* 

# Why do mosquitoes bite humans?

They need human blood as nutrition for their eggs. A syringe like apparatus on a mosquito's head draws blood upon a bite.

# Why do mosquito bites itch so much?

The itch is an immune response to mosquito saliva. Before drawing blood, the mosquito first injects her saliva, which causes an immune response, resulting in histamine rushing to the site of the bite, causing a red, itchy welt.

### What relieves the itch?

Ice can combat the itch when applied to the bite area. Another good way to reduce swelling and itching is to apply hydrocortisone, calamine or anti-histamine cream.

When these medications do not relieve the itch, discuss a personal mosquito bite action plan with an <u>allergist</u>. Many individuals are not aware that <u>allergy</u> <u>shots</u> are helpful in most cases for those who have had an extreme allergic reaction to a mosquito bite!

At least 15 cases of *locally transmitted cases* of Zika virus have been identified in Southern Florida!

Use these tips from our physicians to help avoid mosquitoes and Zika virus threat.



<u>9 Office Locations!</u> NJ & PA



### Are mosquito bites dangerous?

Besides the uncomfortable local reaction, mosquito bites can become infected and/or can spread serious viral illnesses, including West Nile virus and Zika virus, which are the current threats from mosquito bites in the United States. If you are traveling outside the U.S., the current threats include malaria, yellow fever, dengue fever, chikungunya, and Japanese encephalitis.

### How can one be protected from a bite? What works? What does not work?

#### Smart clothing choices are essential.

**Subscribe** 

• Long sleeves and pants, tucked into socks. Light colored clothing. Loose fitted clothing.

# Smart protective sprays have been shown effective for repelling mosquitoes.

- Repellents containing the following ingredients are ideal.
  - 1. DEET (10-30%)

Concentrations with greater than 50% DEET have been not shown to be more effective than concentrations of 30% DEET Brands include Ben 's<sup>®</sup> Tick and Insect Repellents, OFF!, and

#### Cutter

- 2. Oil of lemon eucalyptus (must be synthetic) Look for "p-methanediol" on ingredient list Brand: Repel
- 3. Picardin Brand: Sawyer
- 4. IR3535

Permethrin-treated clothing ( such as the <u>No Fly Zone Line</u> from L.L.Bean ) is also a good option.

• DIY option: treat clothing with <u>permethrin</u> *before* exposure. Be sure to apply repellent to exposed skin.

Travel with a <u>bed net</u> for protection while sleeping outdoors. Treat bed netting with permethrin. There are also <u>nets</u> to cover food available.

"Natural "Repellents such as citronella, peppermint, and geranium oil have not been shown to be very successful.

### **Backyard mosquitoes?**

# Here's how to control them.

Mosquitoes multiply in standing water. Be sure to remove all sources of standing water including on top of pool covers, bird baths, logs, tires, and flower pots.

## Why do some people get more bites than other people?

One research study demonstrated mosquitoes had no preference between identical twins but the same was not true for fraternal twins. Therefore, genetics play a role in whether or not mosquitoes prefer one human over another. Human breath attracts mosquitoes due to exhaled carbon dioxide well as other chemicals. Other chemicals (such as perfumes and colognes), body heat, and some bacteria on the skin also attract mosquitoes. Mosquitoes are especially

attracted to larger people, including pregnant women, as they exhale more carbon dioxide.

## Repellent devices? Do they even work?

Studies have shown zapper and ultrasonic devices do very little to keep mosquitoes away.

Clip on and wrist repellents are not as effective as they were once believed to be.

### **More Resources:**

### Zika Virus:

- CDC
- CDC protect yourself
  infographic
- Philadelphia Department of
  Public Health
- NJ Department of Health

### More on Mosquitoes:

- Berkley *Wellness*, University of California
- American Academy of Allergy Asthma & Immunology