



# Mosquitoes

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The long summer nights are upon us and with the stars in the sky and the sounds of the chirping crickets, it's nice to sit outside and take pleasure of the warm season. As dusk approaches though, those pesky mosquitoes are out amongst us as well. Some experts are predicting one of the worst summers in decades for mosquitoes. The mild winter is one reason for the spike. The weather didn't get cold enough to kill off all the eggs and because of the warmer winter, mosquitoes started laying eggs earlier this year<sup>1</sup>.

Mosquitoes are not only a nuisance; their bites can cause the transmission of diseases such as malaria, yellow fever, encephalitis, and West Nile virus to humans and animals. "Symptoms of most of these diseases include fever, headache, nausea, vomiting, and rash, which are mild symptoms to severe symptoms that include neck stiffness, stupor, disorientation, tremor, coma, vision loss, and paralysis. These severe symptoms could last weeks or could be permanent. The onset of symptoms usually begins three to 14 days after a mosquito bite. However, up to 80% of people who are infected with WNV will show no symptoms at all. People who are mostly likely to show symptoms if bitten by an infected mosquito are infants, the elderly and people with auto-immune deficiencies"<sup>2</sup>.

Some people are more prone to being bitten by a mosquito than others. Mosquitoes are attracted to the carbon dioxide of the air we exhale. A pregnant woman may exhale up to 21 percent more carbon dioxide than a non-pregnant woman<sup>3</sup>. Mosquitoes are also attracted to lactic acid, which is produced in muscles during exertion and released by your sweat glands. Movement, sweat, moisture and dark colors also attract mosquitoes. There are ways to ward off these members of the fly family; however, some ways are more harmful than others.

DEET is the most common active ingredient in insect repellents and should be used with caution. Researchers suggest that humans may experience memory loss, headache, weakness, fatigue, muscle and joint pain, tremors and shortness of breath with heavy exposure to DEET and other insecticides<sup>4</sup>. Children are particularly at risk of these side effects because their skin absorbs chemicals in the environment and these chemicals more potently affect their developing nervous systems.

The following precautions were issued by The New York State Department of Health for repellents containing DEET:

- Store bottle out of the reach of children and read all instructions on label before applying.
- Do not let children apply DEET themselves because they may put them in their mouths or touch their eyes.
- Avoid prolonged and excessive use of DEET. Use sparingly to cover exposed skin; do not treat unexposed skin.

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*References:*

1. Associated Press. Mild Winter Means More Mosquitoes. Western Kentucky News. June 24, 2012. <http://m.courierpress.com/news/2012/jun/24/mild-weather-may-mean-more-mosquitoes>. Accessed on June 26, 2012.
2. Mosquito Magnet. Mosquito Diseases. American Biophysics Corporation. <http://www.mosquitomag.netdepot.com/info/mosquitoinfo.html>. Accessed on June 26, 2012.
3. Knight, Meridith. Why do mosquitoes bite some people more than others? ScienceLine. September 10, 2007
4. Hull, Janet Starr. How to beat those summer skeeters. May 2003. <http://www.sweetpoison.com/newsletter/may-2003.html#skeeters>. Accessed on June 26, 2003

Federal Law requires that we warn you of the following:  
1. Your individual health status and any required health care treatments can only be properly addressed by a professional healthcare provider of your choice.  
2. *The information provided in this newsletter has not been evaluated by the FDA.*

- Do not apply repellents in enclosed areas. This is especially important when using sprays or aerosols.
- Do not apply directly on face.
- DEET can be applied to clothing, but may damage some synthetic fabrics and plastics.
- Wash treated skin and clothing after returning indoors.
- If you believe you are having an adverse reaction to a repellent containing DEET, wash the treated area immediately and call your physician.

There are less harmful ways to reduce your chances of being bitten by a mosquito.

### **In your backyard**

Use LED light bulbs. The LED bulb will not emit wavelengths in the UV spectrum like others do which does not generate as much heat.

Nathan Powell, senior environmental health specialist at the Lexington Health Department, says a good way to control the populations of the bug is to empty any standing water around a home since it takes less than an inch of water for mosquitoes to lay eggs.

Merigolds, catnip, rosemary, and citronella are a few plants that ward off mosquitoes due to their oils and scents.

Burn a citronella candle. Mosquitoes avoid citronella and they hate the smoke.

### **Non-DEET products**

Bite blocker Xtreme is an all natural insect repellent that is waterproof, sweat proof, and safe on kids. Its natural ingredients are soybean oil, geranium oil and castor oil.

There are citronella oils and soap which you can apply directly onto the skin. Citronella essential oil, Java Citronella, is 100 percent pure essential oil with no additives and no diluents. The soaps are made with olive oil for moisture and great lather, Aloe Vera to soothe the skin, and citronella oil to repel mosquitoes.

### **Mosquito bite relief**

Dr. Mao Shing Ni, Doctor of Chinese Medicine, who sits with the panel of experts on the Dr. Oz Show, recommends a few natural remedies to help soothe the itch of a mosquito bite:

- Use an ice pack for temporary relief of severe itching and swelling.
- Place cucumber skins on top of the bites to sooth the itching and irritation. You can also cut 2-inch round slices from a fresh eggplant and place on top of bite to draw out toxins and sooth the irritation.
- Apply honey to a bug bite to sooth the skin. Because honey is a natural antibiotic, it can also help prevent infections.
- Apply a blend of essential oils of eucalyptus, winter green and peppermint or tea tree oil to bites every 2 to 3 hours to relieve itching and aid healing.

A strong immune system and high nutrient levels help repel insects and prevent the diseases they may carry. Getting your body as healthy as possible by knowing exactly what *you* need can be tested and determined by an experienced nutritional expert. Comprehensive blood and hair tissue mineral analysis determine your health status and, with the guidance of your doctor, can direct you in the right direction towards optimal health. Get tested today to know exactly what *you* need.