advance for NURSES Patient Handout

The Buzz on Bug Bites

During the summer months, children and adults alike are subject to bites from mosquitoes, bees and ticks. These insects, found almost everywhere, are responsible for more than half a million ED visits and at least 50 deaths per year.

Mosquito Bites

When these pests bite, they inject saliva into the skin while sucking out blood. The saliva then creates that familiar sensation of uncontrollable itchiness.

To avoid being bitten by mosquitoes:

- Avoid standing water (even old tires or bird baths filled with water can breed mosquitoes).
- Wear long sleeves and pants.
- Use insect repellent on ankles and other uncovered areas of skin.
- Avoid eating bananas outdoors (the scent attracts mosquitoes).
- Avoid peak hours of high mosquito activity, such as dawn, dusk and after rain.
- Make sure any screen windows in your home are in good condition.

If you do get stung, your skin will get red, itch and may swell.

To treat a mosquito bite:

- Wash infected area with warm soap and water.
- Apply cool compresses to reduce swelling.
- Use anti-itching lotions or baking soda multiple times a day to reduce itchiness.

Bee Stings

Bee stings are very dangerous and can lead to a severe allergic reaction called anaphylaxis. For every one in 100 people, a bee sting may be fatal. You may not have an allergic reaction the first time you are stung by a bee; however, the next time, your body may react. People do not build up immunity the more they get stung by bees.

People who have severe allergic reactions to bee stings should get an epinephrine injection pen from their physician. They should keep it with them whenever they are outside or in a situation where they might be stung.

Mild reactions to bee stings include annoying itching (especially in areas around lymph nodes, such as under the arms), stinging and swelling. Delayed reactions may include fever, painful joints or swollen glands. A severe reaction can occur quickly; symptoms include facial swelling, difficulty breathing, shock, weakness, dizziness and nausea.

To prevent bee stings, avoid garbage cans, beverages that contain sweetener and strong-smelling perfumes. Wear light-colored, loose clothing. Clean up trash around picnic areas and grills. Also, run away if multiple bees begin to sting at once.

To treat a bee sting:

- Scrape stinger off with a credit card or straight-edged object or use your thumbnail (bees leave the stinger in your skin, which can prolong the pain and will continue to shoot the venom into your body). Never squeeze or use tweezers to pull out the stinger — it will release more venom into the skin.
- For a mild reaction, remove stinger, wash area with warm soap and water, apply ice to reduce swelling and take pain relievers or antihistamines.
- Severe reactions usually are treated with epinephrine, commonly self-injectable into the front of the thigh. Call 911 immediately for emergency medical attention if severe symptoms are present.

Ticks

Ticks range in size from that of a pinhead to a sesame seed or pencil eraser-size. They are likely to be found in areas such as parks and heavily wooded areas. Tick bites can cause redness, pain, swelling, flu-like symptoms (fever, headache, nausea, fatigue, chills) and loss of appetite.

Ticks can carry Lyme disease, often leaving a characteristic bull's eye rash on the infected area of skin after biting someone. Untreated cases of Lyme disease can result in far worse symptoms that spread throughout the body, including loss of muscle tone in the face, neck stiffness and heart palpitations. After a few months, symptoms include arthritis and joint pain and swelling.

Another disease spread by ticks is Rocky Mountain spotted fever with symptoms of fever, headache and muscle pain, followed by a rash.

Though all ticks do not carry these diseases, tick bites should be avoided. Wear long sleeves and pants, and tuck pants into socks to protect your ankles. Use insect repellent with DEET. Do regular "tick checks" on yourself and others if you spend time outdoors, examining behind the knees, hair and scalp, around the waist, under the arms and around the ears. Check clothing and pets for ticks as well.

To treat tick bites:

- Remove ticks carefully by using fine-tipped tweezers, pulling the tick straight out (twisting may dislocate the head of the tick from the body).
- Discard the tick in alcohol to kill it.
- Wash the site with warm water and soap.

Contact a physician if you experience a fever, rash or headache; have trouble walking; or the tick has remained in the skin for more than 24 hours. ■

Resources

CDC. (2006). *Learn about Lyme disease*. Retrieved June 12, 2006 from the World Wide Web: http://www.cdc.gov/ncidod/dvbid/lyme/index.htm

Mayo Foundation for Medical Education and Research. (2006). *Insect bites and stings: First aid*. Retrieved June 7, 2006 from the World Wide Web: http://www.mayoclinic.com/health/first-aid-insect-bites/FA00046

—Compiled by Jeannette Sweeney
editorial intern at ADVANCE

(CUT ALONG THE DOTTED LINE AND PHOTOCOPY THIS HELPFUL HANDOUT FOR YOUR PATIENTS.)