



## WE'VE ALL HAD A PLEASANT

sunset ruined by swarms of mosquitoes, or a picnic disrupted by curious yellow jackets. A little knowledge goes a long way toward keeping bugs at bay.

The great outdoors would be even greater if the insects you encounter there didn't bite, transforming an otherwise enjoyable outing into an itchy, scratchy event—or worse. But many insects do come equipped with a stinger, so it's a good idea to keep the following tips in mind, especially when you're traveling through unfamiliar terrain.

- **Know where insects are potentially troublesome.**

In North America, disease-carrying species are found predominantly in some rural and wilderness areas. Check your destination. The Web sites of the National Park Service and National Forest Service and individual parks and forests carry such information. It is also posted at their visitors' centers. Many state and Canadian provincial governments have similar Web sites.

- **Apply insect repellents to skin and insecticides to clothing.** Safe, effective products are available that will greatly reduce your chances of being bitten.

- **Consider wearing long sleeves and pants in insect-infested areas.** Garments should fit snugly around the neck, wrists, and ankles. Newer fabrics make such clothing bearable in hot weather. Avoid sheer tight-fitting garments since insects bite through them. Hats are also helpful.

- **Wear shoes and socks. Do not go barefooted or wear sandals.** Many biting insects fly just above the ground. Shake clothes left on the ground before putting them back on. Light-colored clothing is less appealing to insects than darker clothes and makes insects more visible.

- **Make yourself unattractive to insects.** Leave jewelry and shiny belt buckles at home. Don't use perfumes and other scented soaps and cosmetics, and avoid contact with heavily scented products during the course of your day.

- **Avoid insect-provoking activities.** These include swimming after dusk, walking in thick underbrush, shaking bushes, and overturning rocks and dead trees. Don't lie directly on the ground; even lying on a blanket is somewhat protective.

- **Know how to protect yourself against bees, hornets, and wasps.** Insect repellents don't deter them. Bites are common at picnics, while picking fruits and berries, or collecting wildflowers. Cover as much skin as possible with clothing. Keep picnic tables clean and food and beverages covered when not in use. These insects are particularly drawn to ripe fruits and sweet soft drinks. Keep garbage covered. In orchards, leave overripe items on the ground. In the autumn, avoid close contact with flowering trees, shrubs, and flowers where these insects collect nectar.
- **Remain still around bees, wasps, and hornets.** Swatting at them provokes them and increases the chances of being bitten. Walk away slowly. If you kill one, leave the area. The venom odor attracts others to the site.
- **DEET is the most thoroughly studied insect repellent.** No repellent bears this name, it is the active ingredient in most products. DEET is safe when used correctly, and only extreme misuse has caused toxic reactions. Skin rashes do occur, but rarely. DEET repels more types of disease-carrying insects than other substances.
- **DEET comes in all forms and strengths.** There are lotions, creams, gels, aerosols, and towelettes. Acquaint yourself with several products. Read instructions. Know the concentration of DEET in the product. Contact manufacturers, if necessary; most have Web sites.
- **Apply DEET to exposed skin only.** There is no need to place it under clothing, especially since it damages synthetic fibers. A thin coating is sufficient, since more does not increase protection. Avoid eyes, mouth, wounds, or rashes. If accidentally applied to such areas, rinse with soap and water. Apply in a well-ventilated area, and wash off when no longer needed.
- **Picaridin-containing repellents appear to be effective and as safe as those containing DEET.** Picaridin was approved in the U.S. in 2001, but has been used elsewhere for longer. It appears to be as effective against as many different species of insects as DEET. In addition, it is fragrance-free and does not need to be washed off when returning indoors.
- **"Natural" products are not necessarily better.** Many such products are available. These, too, are chemicals, and most have not been thoroughly studied. The most popular one is oil of lemon eucalyptus. Its protective qualities are similar to repellents with low concentrations of DEET.
- **Avoid products that are useless or inadequately researched.** Wristbands are ineffective. Taking vitamin B merely reduces itching from bites, causing you to think you are being bitten less. Sound and light devices do attract insects to your area, but insects prefer you to the devices, possibly increasing your chances of being bitten. Products that emit vapors may be harmful if inhaled indoors over

## Insects Online

Visit the following sites and search using "insect bites" to learn more about types and treatments.

United States National Library of Medicine  
www.nlm.nih.gov

eMedicineHealth  
www.emedicinehealth.com

WebMD  
www.webmd.com

The Mayo Clinic  
www.mayoclinic.com

Derm Atlas  
www.dermatlas.com

Centers for Disease Control and Prevention  
www.cdc.gov

*“Taking vitamin B merely reduces itching from bites, causing you to think you are being bitten less, and although sound and light devices do attract insects to your area, insects prefer you to the devices.”*

prolonged periods of time. Outdoors, vapor effectiveness depends on wind direction and other factors.

- **Don't use products that combine insect repellents and sunscreens.** While many situations call for both, the intervals of applications and other considerations make combination products impractical. Generally, apply the sunscreen at least 20 minutes before sun exposure while the repellent can be applied just before exposure. The repellent may reduce the effectiveness of the sunscreen. Consider using a stronger sunscreen. ☞