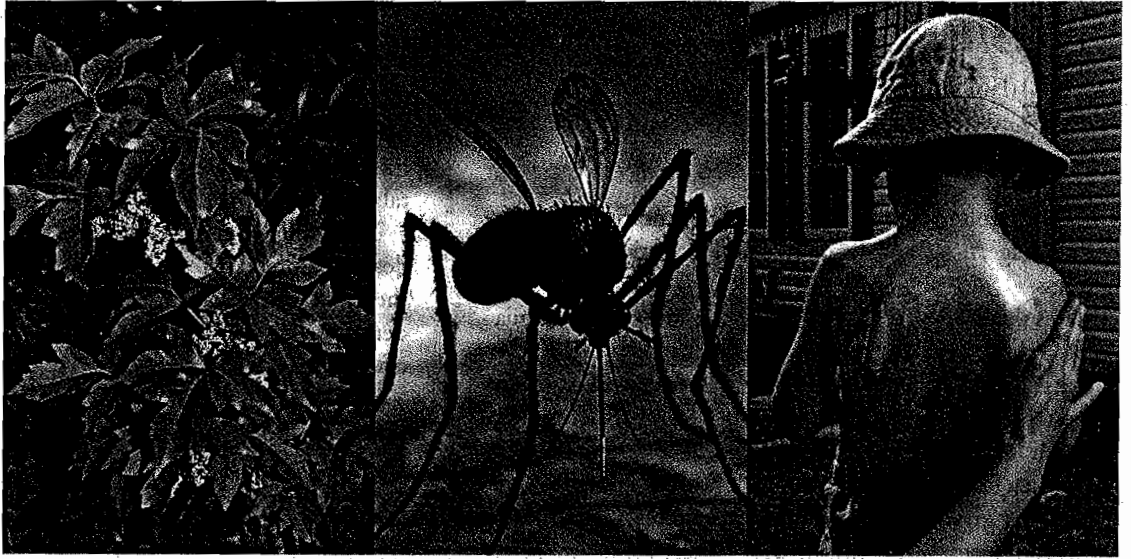


Don't let plants, bugs, sun mar your patients' summer fun



by **Michael L. Smith, M.D., FAAP, FAAD**

As families head outdoors this summer, it is imperative that they protect their children from potential dermatologic dangers, including plants, bugs and sun.

Plant allergies

The most common plants responsible for contact dermatitis are poison ivy, poison oak and poison sumac. Exposure times as brief as 15-20 minutes may produce reactions in highly allergic individuals. The linear streaks or clusters of pruritic papules and vesicles may develop a few hours after exposure.

Plant contact allergy reaction times depend on the amount of oleoresin applied to the skin. Areas with the

most sap react quickly, while areas with less sap may take two to three days. Even lighter contact may delay the rash by five to six days. A single exposure may produce new crops of itchy bumps for more than a week. Contrary to popular belief, the blister fluid does not "spread" the rash.

Some commercial products containing bentonite clay may reduce the risk of contact allergy reactions by adsorbing the allergen. These creams are applied to exposed skin before venturing out into wooded areas. Individually wrapped towelettes containing detergents can inactivate or remove the allergens if they are used within about 15 minutes of plant contact.

Insect bites

West Nile virus and other arthropod-borne infections have prompted the Academy and the Centers for Disease Control and Prevention (CDC) to strengthen their recommendations regarding the use of insect repellents in children.

The AAP Committee on Environmental Health concluded in 2003 that 30% concentrations of DEET are as safe as 10% when used properly. Since the duration of protection is directly related to the concentration (see table at <http://aapnews.aapublications.org/content/33/7/1.2.full>), the current CDC and AAP recommendation is that children older than 2 months of age should be protected with 30% DEET or up to 15% picaridin. The repellents should be applied in small amounts to exposed skin, then washed off after the outdoor activities.

Oil of lemon eucalyptus repellents should not be used on children younger than 3 years. Safety data in children for repellents containing IR3535 are not available. Combination sunscreen/repellent products should never be used in children since repellents should be applied only once for the day, but sunscreens need repeat application every 1½ hours.

Ticks pose a special problem due to potentially serious infections they may transmit. Also, some repellents are less effective against ticks than against mosquitoes or other biting insects. Ticks are best repelled by DEET in concentrations above 20%, picaridin or permethrin-treated clothing. Catnip oil is not effective against ticks.

For more information on repellents, visit www.cdc.gov/ticks/index.html, <http://cfpub.epa.gov/oppref/insect/> (the EPA includes a search tool for the right repellent for activities and times) or <http://npic.orst.edu/>.

Sun safety

Reminding families to "slip, slap, slop" (slip on a shirt, slap on a hat, slop on sunscreen) can help avoid sunburn as well as the long-term dangers of over-exposure.

No sunscreen lasts longer than about 90 minutes if swimming or perspiring, so frequent reapplication is important. An average 8-year-old will need to apply about an ounce of a creamy sunscreen, while adults need about 1½ ounces. So a family of four spending three hours by the pool should use up an entire 10-ounce bottle.

For broad spectrum protection against both UVB and UVA wavelengths, pediatricians should advise the use of

Medications and plants capable of causing phototoxic or photoallergic reactions

Phototoxic reactions

Medications: tetracycline, oral contraceptives, quinine, psoralen, naproxen, griseofulvin, amiodarone, furosemide, thiazides, phenothiazines

Plants: carrots, celery, pink lot, dill, fennel, fig, lime, parsley, parsnip, angelica, buttercup, lemon, mustard, Persian lime, scurvy pea, St. John's wort, wild chervil, yarrow

Photoallergic reactions

Medications: fragrances (sandalwood, musk ambrette), sunscreens (especially PABA), chlorpromazine, promethazine

Plants: goldenrod, yarrow, tansy, ragweed, dandelion, sunflower, sneezeweed, dog fennel, artichoke, chrysanthemum, burdock, fleabane, ox-eye daisy, liverworts, magnolia, tulip tree

sunscreens containing at least 5% zinc oxide or the patented photostabilized UVA protectant Helioplex.

In addition to sun precautions, it is important to be aware of potential photosensitivity reactions to medications and plants (see table below). Phototoxic reactions develop quickly like accelerated sunburn, often with blistering. Photoallergic reactions develop in 24-48 hours and look much like a poison ivy reaction confined to sun-exposed skin. The major difference is that photoallergic reactions are confluent crops of papules, rather than the streaky patches typical of plant contact reactions.

Another group of conditions include the polymorphous light eruption (PMLE) group. The most common type of PMLE consists of grouped pruritic papules on the malar and lateral cheeks, ears and forearms. This eruption appears most often after the first big outdoor sun exposure of the season. It recurs with subsequent exposure, often despite good sunscreen use, but usually begins to improve by mid-summer. Annual recurrence is common.

An unusual childhood variant known as juvenile spring eruption presents as clusters of tiny papules and vesicles on the tops of ears of boys under age 10 years. The vesicles leave scabs and hypopigmentation. Zinc oxide and titanium dioxide sunscreens may help prevent PMLE or reduce the frequency and severity of recurrences.

A little prevention can make the outdoor summer experience fun and safe for all.