



PIC QUESTION OF THE WEEK: 4/28/08

Q: Are DEET containing products still considered safe for use in children?

A: N,N-diethyl-3-methylbenzamide (DEET) is the most common insect repellent used in the United States. It is effective against mosquitoes, biting flies, chiggers, fleas, and ticks. The United States Department of Agriculture (USDA) developed this product in 1946 for use by the military. In 1957, it became available to the general public. It is estimated that 23-29% of the U.S. pediatric population uses DEET products annually. Many parents, however, are reluctant to use DEET products in children due to previous reports of serious adverse events including seizures. There have been ten such cases reported during the past fifty years (all prior to 1992), none of which were conclusively linked to DEET. The American Academy of Pediatrics (AAP) currently recommends the use of DEET-containing products in children over *two months* of age. The AAP also advises using DEET formulations with a concentration of 10-30%, although concentrations *above 10%* should be reserved for *deep woods* and *high risk* adventuring. DEET concentrations within these ranges will provide protection from bites for 2-5 hours with higher concentrations yielding a longer duration of protection. The maximum recommended dose of a DEET repellent for children is three applications per day. The Environmental Protection Agency (EPA) has published a list of safety tips for the use of DEET-containing products in children.

- Do not use over cuts, wounds or irritated skin
- Do not apply to eyes, mouth, or hands; use sparingly around ears
- Use just enough repellent to cover exposed skin
- After returning indoors, wash skin with soap and water. Wash all clothing exposed to the repellent prior to next wear

Preventing insect bites in children will help keep them comfortable and control the spread of insect-borne diseases. DEET-containing products, when used properly, are safe and effective formulations that allow children to enjoy outdoor activities.

References:

- American Academy of Pediatrics. Following safety precautions when using DEET on children. <http://www.aap.org/family/wnv-jun03.htm>. (accessed April 21, 2008).
- The Environmental Protection Agency. The insect repellent DEET. <http://www.epa.gov/opp00001/factsheets/chemicals/deet.htm>. (accessed April 23, 2008).
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