**“FIGHT THE BITE” - - - INSECT REPELLANT USE**

**Insect Repellant Products:**

Several EPA registered products provide repellent activity sufficient to help people avoid the bites of disease carrying mosquitoes. Products containing these active ingredients typically provide reasonably long-lasting protection:

**DEET (N,N-diethyl-m-toluamide):**

The most widely used insect repellent is the most reliable and longest lasting agent. It repels mosquitoes, ticks, gnats, and some flies. Some people dislike the odor and the product can stain clothing, and plastics. The length of time for which DEET is protective depends on the concentration of the product.

**Picaridin (KBR 3023):**

An odorless product which does not harm clothing or plastics, it is considered safe for pregnant women and children less than 2 months old. It does not provide protection against gnats. While it is considered not irritating to the skin, contact with eyes should be avoided. A single application is protective for about 2.5 hours.

**Oil of Lemon Eucalyptus:**

This product is not recommended for use with children under 3 years of age. While it doesn’t stain clothing or plastics, it can discolor leather products.

**Permethrin:**

This product should only be used on clothing, shoes, bed nets, and such items as camping equipment. It should NEVER be used on skin.

**Insect Repellant Product Use on Children:**

Products registered by Environmental Protection Agency (EPA) and used according to the label directions are considered safe for children and others.

Repellent products must state any age restriction. If there is none, EPA has not required a restriction on the use of the product.

In addition to EPA’s decisions about use of products on children, many consumers also look to the opinion of the American Academy of Pediatrics (AAP). The AAP does have an opinion on the use of DEET in children (see below). AAP has not yet issued specific recommendations or opinion concerning the use of picaridin or oil of lemon eucalyptus for children.

Since it is the most widely available repellent, many people ask about the use of products containing DEET on children. No definitive studies exist in the scientific literature about what concentration of DEET is safe for children. No serious illness
has been linked to the use of DEET in children when used according to manufacturer's recommendations.

"Insect repellents containing DEET (N,N-diethyl-m-toluamide) with a concentration of 10% appear to be as safe as products with a concentration of 30% when used according to the directions on the product labels."

- The American Academy of Pediatrics recommends that repellents with DEET should not be used on infants less than 2 months old.
- Parents should choose the type and concentration of repellent to be used by taking into account the amount of time that a child will be outdoors, exposure to mosquitoes, and the risk of mosquito-transmitted disease in the area.
- Always follow the recommendations appearing on the product label when using repellent.
- When using repellent on a child, apply it to your own hands and then rub them on your child. Avoid children's eyes and mouth and use it sparingly around their ears.
- Do not apply repellent to children's hands. (Children may tend to put their hands in their mouths.)
- Do not allow young children to apply insect their own repellent; have an adult do it for them.
- Keep repellents out of reach of children.
- Do not apply repellent under clothing. If repellent is applied to clothing, wash treated clothing before wearing again. (This may vary by product, check label for specific instructions.)
- If there is ongoing concern about using repellent products on children, a health care provider should be sought for advice. Alternatively, the National Pesticide Information Center (NPIC) can be contacted through their toll-free number, 1-800-858-7378 or npic.orst.edu

Using repellents on the skin is not the only way to avoid mosquito bites:

- Children (and adults) can wear clothing with long pants and long sleeves while outdoors.
- DEET, or other repellents such as permethrin, can also be applied to clothing, as mosquitoes may bite through thin fabric. Permethrin should never be used on skin.
- Mosquito netting can be used over infant carriers.

Recommendations for combination sunscreen/insect repellent products:

- People can, and should, use both a sunscreen and an insect repellent when they are outdoors.
- Follow the instructions on the package for proper application of each product.
- In general, the recommendation is to apply sunscreen first, followed by repellent.
• It is recommended NOT to use a single product that combines insect repellent containing DEET and sunscreen, because the instructions for use of insect repellents and use of sunscreen are different.
• In most situations, insect repellent does not need to be reapplied as frequently as sunscreen.

Insect Repellent Product Use on Pets:

• Do not use any product on pets or other animals unless the label clearly states it is for animals.
• Most insect repellents licensed for human use do not work on lice or fleas.

For more information:

- Centers for Disease Control and Prevention (CDC)
  (Division of Vector-Borne Infectious Diseases):
  http://www.cdc.gov/ncidod/dvbid/westnile/ga/insect_repellent.htm

  (CDC Travelers’ Health – Yellow Book)

- Environmental Protection Agency
  http://www.epa.gov/pesticides/health/mosquitoes/ai_insectrp.htm