



## Choosing and Using Insect Repellent

*Prepared by the Health Consultant Team at Child Care Aware® of North Dakota*

### Parental permission for the use of insect repellent

- Insect repellent is not recommended for children under 2 months of age. Mosquito netting or clothing should be used instead. Written permission and instructions from a health care provider should be obtained if parents request that insect repellent be used for children under 2 months of age.
- Written parental permission should be obtained before applying repellent to any child in your care. See [Authorization for Non-Prescription Products Form](#).
- Written instructions should be obtained if parents DO NOT want insect repellent applied to their child who is over 2 months old. See [Parent Request for No Insect Repellent Form](#).
- Write on daily communication sheet or verbally notify parent if insect repellent is applied.

### Choosing an insect repellent

- The Centers for Disease Control (CDC) has recommended products with the following active ingredients for protection from the West Nile virus: DEET, Picaridin, Oil of Lemon Eucalyptus (PMD), and IR3535.
- Products with oil of lemon eucalyptus (PMD) should not be used on children under 3 years of age.
- The American Academy of Pediatrics (AAP) has approved 10-30% DEET (N,N-diethyl-m-toluamide) on children 2 months old or older as of June 2003. No products with more than 30% DEET should be used on children.
- The AAP has approved products with 5-10% Picaridin to be used on children
- Always check the amount of DEET on a repellent label. It is important to remember that a higher percentage of DEET in a repellent does not mean that the protection is better; it just means it will last longer.
- Choose a repellent with a percentage of DEET that provides protection for the amount of time that you are outdoors. A higher percentage of DEET should be used if you will be outdoors several hours, while a lower percentage of DEET can be used if time outdoors is limited to 2 hours or less.
- A product containing 23.8% DEET provides 5 hours of protection; 20% DEET provides 4 hours of protection; 6.65% DEET provides 2 hours of protection; 4.75% provides 1.5 hours of protection.
- Insect repellent lotion containing DEET is not recommended. Because you have to rub lotion into the skin, it causes the DEET to be deeply penetrated into the skin. Insect repellent spray or wipes are safer choices.
- Some other products (ex. Skin-So-Soft, plant-based repellents, etc.) also provide some protection from mosquito bites. However, studies suggest that these products do not offer the same level of protection, or the protection may not last as long. Closely follow directions on label for use.

### Use of insect repellent with sunscreen

- It is not recommended to use products that combine DEET with sunscreen. DEET is not water-soluble, so it stays on the skin for 8 hours. Sunscreen is water-soluble, so it needs to be reapplied if skin becomes wet with sweat or water. An unsafe amount of DEET can be absorbed if it is reapplied at the same frequency as sunscreen.

- Only DEET-based repellents have been recommended by the CDC to be used along with a separate sunscreen. No data is available at this time regarding the use of other active repellent ingredients and sunscreen.
- If sunscreen and insect repellent both need to be applied, apply the sunscreen first, followed by the insect repellent.

## Guidelines for application of insect repellent

- Repellent can be applied to clothing to protect children from mosquitoes. It is safest to spray clothes when off child, let the clothes dry, then put on child. Remove clothing once inside. Clothing should be washed before it is worn again.
- Do not apply a second application to a child.
- Only apply repellent to skin that is exposed. Do not apply repellent to skin under clothing.
- Use just enough repellent to cover exposed skin and/or clothing. Heavy application and saturation are not recommended.
- Do not apply repellent to children's hands, or around their eyes or mouth. Apply sparingly around ears.
- Do not apply repellent to cuts, rashes, wounds, or irritated skin.
- Do not allow young children to apply insect repellent to themselves. Keep all insect repellents out of the reach of children.
- Wash treated skin with soap and water after being outside for the day.
- Never spray repellent directly on a child. Pump sprays are a safer choice than aerosols. Spray the product on your hands then apply to child. Do not spray aerosol or pump products in enclosed areas.
- Insect repellent wipes are an alternative to aerosol or pump sprays. They can prevent children from inhaling the repellent or mistakenly getting it sprayed into their eyes or mouth. Closely follow directions on label for use.

## Allergic reactions:

- If a child develops a rash or apparent allergic reaction from an insect repellent, stop using the repellent. Wash it off with soap and water, and call the poison control center (1-800-222-1222). If a product gets in the eyes, flush with water and consult a health care provider. If you go to a health care provider, take the product with you.

## Guidelines for minimizing bites

- Avoid areas where insects nest or congregate such as garbage cans, stagnant pools of water, uncovered food or sweets, and orchards and gardens where flowers are in bloom.
- Dress the child in long pants and a lightweight, long-sleeved shirt when you know they will be exposed to insects
- Avoid clothes with bright colors or flowery prints; they seem to attract insects.
- Avoid scented soaps, perfumes, or hair spray because they are inviting to insects

### Resources:

*CFOC, 3rd Edition, 2011*

*Insects Bites & Stings, HealthyChildren.org, AAP, 2011*

*"Follow safety precautions when using DEET on children", AAP, 2003*

*CDC: West Nile Virus – QA: Insect Repellent Use and Safety, June 2005*

*"DEET Alternatives Considered to be Effective Mosquito Repellents", AAP News, June 2005*

*Updated Information regarding Insect Repellents, CDC, May 8, 2008*

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