

# Sherman County Health Department

## Choosing an Insect Repellent

Mosquitoes and tick bites can make us not only miserable but can give us diseases such as Zika, West Nile, Encephalitis, Chikungunya, Dengue Fever, Lyme, and Rocky Mountain spotted fever. One way to protect yourself from biting insects is to use insect repellents. However, it's important that insect repellents are used safely and correctly.

Insect repellents come in many forms, including aerosols, sprays, liquids, creams, and sticks. Some are made from chemicals and some have natural ingredients. Insect repellents prevent bites from biting insects but not stinging insects. Biting insects include mosquitoes, ticks, fleas, chiggers, and biting flies. Stinging insects include bees, hornets, and wasps.

### Available Insect Repellents

| What's available   | How well it works  | How long it protects  | Special precautions   |
|--|--|---|---|
| Chemical repellents with DEET (N, N-diethyl-3-methylbenzamide)   | Considered the best defense against biting insects.  | About 2 to 5 hours depending on the concentration of DEET in the product. | Caution should be used when applying DEET to children   |
| Picaridin  | In April 2005 the Centers for Disease Control and Prevention (CDC) recommended other repellents that may work as well as DEET: repellents with picaridin and repellents with oil of lemon eucalyptus or 2% soybean oil. Currently these products have a duration of action that is comparable to that of about 10% DEET. | About 3 to 8 hours depending on the concentration.                        | Although these products are considered safe when used as recommended, long-term follow-up studies are not available. Also, more studies need to be done to see how well they repel ticks.<br><br>Allergic reactions are rare, but can occur when using repellents made from essential oils. |
| Repellents made from essential oils found in plants such as citronella, cedar, eucalyptus, and soybean |  | Usually less than 2 hours.  |   |
| Chemical repellents with permethrin  | These repellents kill ticks on contact.  | When applied to clothing, it lasts even after several washings.           | Should only be applied to clothing, not directly to skin. May be applied to outdoor equipment such as sleeping bags or tents.   |

### The following types of products are not effective repellents:

- Wristbands soaked in chemical repellents
- Garlic or vitamin B1 taken by mouth
- Ultrasonic devices that give off sound waves designed to keep insects away
- Bird or bat houses
- Backyard bug zappers



### About DEET

DEET is a chemical used in insect repellents. The amount of DEET in insect repellents varies from product to product, so it's important to read the label of any product you use. The amount of DEET may range from less than 10% to more than 30%. DEET greater than 30% doesn't offer any additional protection and should not be used on children under 2 months of age.

### Tips for Using Repellents Safely

- Read the label and follow all directions and precautions.
- Only apply insect repellents on the outside of your clothing and on exposed skin. Note: *Permethrin-containing products should not be applied to skin.*
- Spray repellents in open areas to avoid breathing them in.
- Use just enough repellent to cover your clothing and exposed skin. Using more doesn't make the repellent more effective. Avoid reapplying unless needed.
- Help apply insect repellent on young children. Supervise older children when using these products.
- Wash your skin with soap and water to remove any repellent when they return indoors, and wash their clothing before they wear it again.

**Sherman County Health Department 1622 Broadway Goodland, Ks 67735**

**785-890-4888 [www.shermancountyhealthdepartment.com](http://www.shermancountyhealthdepartment.com)**



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