

Insect Repellent



For Younger 4-H'ers

Picking the right insect repellent could protect your health! Mosquitoes, biting flies, and ticks can be annoying and sometimes pose a serious risk to public health (as seen with West Nile Virus and Lyme disease).

What makes insect repellents work?

Most insect repellents rely on some percentage of a chemical called **deet**. Deet doesn't kill bugs, but its vapors discourage them from landing or climbing on you. Many scientists believe that repellents with deet are the most effective.

How do I choose the correct insect repellent for me?

Insect repellents are available in many different concentrations of deet, ranging from 4 to 100 percent. Choose a repellent that offers the right amount of protection for the amount of time you will be outdoors. Choose a repellent with a higher percentage of deet if you will be outdoors for several hours, but if your time outdoors will be shorter, an insect repellent with a lower percentage of deet can be used.

Can adults and children safely use insect repellents with the same amount of deet?



The Centers for Disease Control and Prevention (CDC) recommend adults use an insect repellent that contains less than 35 percent deet. Children should use a product that contains no more than 10 percent deet. Repellents with deet should be used sparingly on children 2 through 6 years of age and not at all on infants younger than 2 years of age.

Can insect repellents with deet cause harm to me?

The Environmental Protection Agency (EPA) states "as long as consumers follow label directions and take proper precautions, insect repellents containing deet do not present a health concern."

Do insect repellents without deet work well?

Some insect repellents use plant oils instead of deet, but it is important to remember that essential oils, while derived from plants that grow naturally, are chemicals, too. Some are potentially hazardous if ingested, applied over wounds, cuts, irritated skin, or mucus membranes such as the eyes. They are applied directly to the skin and provide some protection from mosquito bites. However, studies have suggested that non-deet repellents do not offer the same level of protection, or that protection does not last as long as products containing deet. A soybean-oil-based product has been shown to provide protection for a period of time similar to a product with a low concentration of deet (4.75 percent).



How to Safely Use Insect Repellents

- ◆ Read and follow all directions and precautions on the product label.
- ◆ Do not apply over cuts, wounds, or irritated skin.
- ◆ Do not apply to the hands or near the eyes and mouth of young children.
- ◆ Do not allow young children to apply this product, and do not apply to children's hands. When using on children, adults should apply it to their own hands and then put it on the child.
- ◆ Do not spray repellent in closed areas. Avoid breathing a repellent spray.
- ◆ Do not use spray repellent near food.
- ◆ Use just enough repellent to cover exposed skin and/or clothing.
- ◆ Do not use under your clothing.
- ◆ Avoid over-application of the product.
- ◆ After returning indoors, wash the treated skin with soap and water.
- ◆ Wash treated clothing before wearing it again.
- ◆ Wash your hands after applying repellent.



Developed by Courtney J. Schoessow, MPH, Extension Associate, Texas A&M AgriLife Extension Service, The Texas A&M System, College Station, Texas, September 2002.