

Insect Repellents

*Josefa Peña, Extension Program Specialist—Health
The Texas A&M University System*

Mosquitoes, biting flies, and ticks are always a nuisance, but sometimes they pose a serious public health risk. Insects can carry diseases such as West Nile Virus or Lyme disease. Choosing the right insect repellent can help protect your health.

Products used to repel insects include liquids, lotions, sprays, and wearable repellents, such as wrist bands. These repellents have different applications and vary by active ingredient and concentration.

When using any insect repellent, look for a U.S. Environmental Protection Agency registration number. Never use a repellent product not approved by the EPA. Store all insect repellents out of children's reach, such as in a locked cabinet or garden shed.

Use insect repellents safely

Before applying an insect repellent, read all the directions and precautions on the product's label. Follow the directions carefully.

- If you are also using sunscreen, apply sunscreen first and insect repellent second.
- Avoid using combination sunscreen/insect repellent products.
- Do not apply an insect repellent to broken or irritated skin.
- When using a repellent on a young child, do not apply it to the child's hands, or near the eyes or mouth.
- Do not allow young children to apply insect repellent.
- Do not spray repellent in enclosed areas or near food. Avoid breathing the spray.
- Avoid spraying repellent products directly in the face or eyes.
- Use just enough repellent to cover your clothing and/or exposed skin.
- Avoid applying too much repellent.
- Wash your hands after the application.
- Do not use insect repellent under your clothing.
- After returning indoors, wash the treated skin with soap and water.
- Wash treated clothing before wearing it again.

Common active ingredients

Most repellents rely on some percentage of the chemical DEET. This chemical does not kill insects; its vapors discourage them from landing on you. DEET is available in many concentrations—use an insect repellent with 30 to 50 percent concentration. You do not need 100 percent DEET. Do not use DEET-based products on infants less than 2 months old.

Another common active ingredient in insect repellents is picardin. Products with 7 to 15 percent picardin are as effective as DEET-based products, but they require more frequent application.

There are natural insect repellents as well. Active ingredients include essential oils such as citronella, eucalyptus, and citrus essential oils. These natural products are exempt from EPA registration.

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