

Reregistration of the Insect Repellent DEET

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1. What is DEET?

DEET (chemical name, N,N-diethyl-meta-toluamide) is the active ingredient in many insect repellent products. It is used to repel biting pests such as mosquitoes and ticks, including ticks that may carry Lyme disease. Every year, approximately one-third of the U.S. population is expected to use DEET. Products containing DEET currently are available to the public in a variety of liquids, lotions, sprays, and impregnated materials (e.g., wrist bands). Formulations registered for direct application to human skin contain from 4 to 100% DEET. Except for a few veterinary uses, DEET is registered for use by consumers, and it is not used on food.

DEET is designed for direct application to human skin to repel insects, rather than kill them. After it was developed by the U.S. Army in 1946, DEET was registered for use by the general public in 1957. Approximately 230 products containing DEET are currently registered with EPA by about 70 different companies.

2. What recent decision did EPA make concerning the use of DEET?

EPA recently issued a Reregistration Eligibility Decision (RED) for the chemical DEET. After completing a comprehensive re-assessment of DEET, EPA concluded that, as long as consumers follow label directions and take proper precautions, insect repellents containing DEET do not present a health concern. Human exposure is expected to be brief, and long-term exposure is not expected. Based on extensive toxicity testing, the Agency believes that the normal use of DEET

does not present a health concern to the general population.

Most of the changes to DEET registrations required by EPA concern label directions and claims. The Agency also is encouraging companies to provide a company telephone number or toll-free number on all product labels for consumers to call for additional

product information and to report incidents. The Agency has determined that registrants may distribute and sell DEET products bearing old labels for 26 months from the date of issuance of the RED, and stores may continue to sell these products for 50 months from the date of issuance.

What is RED? EPA evaluates existing pesticides that originally were registered when the standards for government approval were less stringent. This comprehensive evaluation and risk mitigation process is complete when EPA is satisfied that the pesticide(s), used in accordance with approved labeling, will not pose unreasonable risks to human health or the environment. EPA's regulatory conclusion about each case is presented in a document called a Reregistration Eligibility Decision (RED). Later, once product-specific data and revised labeling are submitted to EPA and approved, the Agency reregisters products containing the eligible pesticide(s). A pesticide product is not reregistered, however, until all of its active ingredients are eligible for registration.

How to use DEET products safely: Consumers can reduce their own risks when using DEET by reading and following products labels. Statements on all DEET product labels will be revised to include the following directions:

- Read and follow all directions and precautions on this product label.
- Do not apply over cuts, wounds, or irritated skin.
- Do not apply to hands or near eyes and mouth of young children.
- Do not allow young children to apply this product.
- Use just enough repellent to cover exposed skin and/or clothing.
- Do not use under clothing.
- Avoid over-application of this product.
- After returning indoors, wash treated skin with soap and water.
- Wash treated clothing before wearing it again.
- Use of this product may cause skin reactions in rare cases. The following additional statements will appear on the labels of all aerosol and pump spray formulation labels:
- Do not spray in enclosed areas.
- To apply to face, spray on hands first and then rub on face. Do not spray directly onto face.

3. How is EPA changing cosmetic claims on DEET product labels?

When DEET products make cosmetic claims, EPA is requiring that labeling for insect repellency be displayed prominently -- first on the label and in large, bold-faced type -- before cosmetic claims. The Agency is concerned that prominent cosmetic claims on DEET labels distracts consumers from label directions that instruct users to apply cautiously and sparingly.

4. Why is EPA changing child safety claims on DEET product labels?

EPA is no longer allowing child safety claims on product labels. These claims currently appear on certain products containing a DEET concentration of 15% or less. The scientific data on DEET do not support product label claims of child safety based on the percentage of active ingredient.


5. What should consumers do in the event of a potential reaction to DEET?

If you suspect that you or your child is having an adverse reaction to this product, discontinue use

of the product, wash treated skin, and call your local poison control center or physician for help. If you go to a doctor, take the repellent container with you.

6. What benefits do DEET products offer?

DEET's most significant benefit is its ability to repel potentially disease-carrying insects and ticks. The Centers for Disease Control (CDC) receives nearly 10,000 reports of Lyme disease (transmitted by deer ticks) and 1,000 reports of encephalitis (transmitted by mosquitoes) annually. Both of these diseases can cause serious health problems or even death in the case of encephalitis. Where these diseases are endemic, the CDC recommends use of insect repellents when out-of-doors. Studies submitted to EPA indicate that DEET repels ticks for about three to eight hours, depending on the percentage of DEET in the product.

For More Information: For medical information, please call the [National Pesticide Information Center](#) (NPIC)  at 1-800-858-7378 (6:30 a.m. to 4:30 p.m., Pacific Time, 7 days/week, except holidays). For a copy of the RED, call EPA at (703) 305-5805, or for more information at (703) 305-5017.

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www.epa.gov/pesticides/citizens/deet.htm
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