

EPA FOR YOUR INFORMATION

Using Insect Repellents Safely

Mosquitoes, biting flies, and ticks can be annoying and sometimes pose a serious risk to public health. In certain areas of the U.S., mosquitoes can transmit diseases like equine and St. Louis encephalitis. Biting flies can inflict a painful bite that can persist for days, swell, and become infected. Ticks can transmit serious diseases like Lyme disease and Rocky Mountain spotted fever. When properly used, insect repellents can discourage biting insects from landing on treated skin or clothing.

Choosing Insect Repellents

Insect repellents are available in various forms and concentrations. Aerosol and pump-spray products are intended for skin applications as well as for treating clothing. Liquid, cream, lotion and stick products enable direct skin application. Products with a low concentration of active ingredient may be appropriate for situations where exposure to insects is minimal. Higher concentration of active ingredient may be useful in highly infested areas, or with insect species which are more difficult to repel. And where appropriate, consider nonchemical ways to deter biting insects—screens, netting, long sleeves, and slacks.

Using Insect Repellents Safely

EPA recommends the following precautions when using insect repellents:

- ▶ Repellents should be applied only to exposed skin and/or clothing (as directed on the product label). Do not use under clothing.
- ▶ Never use repellents over cuts, wounds, or irritated skin.
- ▶ Don't apply to eyes and mouth and, with young children, do not apply to their hands.
- ▶ Avoid breathing a repellent spray, and do not use it near food.
- ▶ Use just enough repellent to cover exposed skin and/or clothing. Heavy application and saturation is unnecessary for effectiveness; if biting insects do not respond to a thin film of repellent, apply a bit more.
- ▶ After returning indoors, wash treated skin with soap and water or bathe. This is particularly important when repellents are used repeatedly in a day or on consecutive days.
- ▶ If you suspect that you or your child are reacting to an insect repellent, wash treated skin and then call your local poison control center. If/when you go to a doctor, *take the repellent with you.*
- ▶ You or your doctor can get specific medical information about the active ingredients in repellents and other pesticides by calling the National Pesticide Telecommunications Network (NPTN) at 1-800-858-7378. NPTN operates from 6:30 a.m. to 4:30 p.m. (Pacific Time) 9:30 a.m. to 7:30 p.m. (Eastern Time) Monday through Friday.

General Note

EPA recommends the following precautions when using an insect repellent or pesticide:

- ▶ Check the container to ensure that the product bears an EPA approved label and registration number. Never use a product that has not been approved for use by EPA!
- ▶ Read the entire label before using a pesticide. Even if you have used it before, read the label again—don't trust your memory.
- ▶ Follow use directions carefully, use only the amount directed, at the time and under the conditions specified, and for the purpose listed. For example, if you need a tick repellent, make sure that the product label lists this use. If ticks are not listed, the product may not be formulated for this use.
- ▶ Store pesticides away from children's reach, in a locked utility cabinet or garden shed.

Avoiding Ticks and Lyme Disease

Lyme disease has become the leading tick-borne illness in the U.S. In 1992, the Centers for Disease Control and Prevention recorded 9,677 cases. The deer tick is the species that most often transmits Lyme disease. With proper precautions, Lyme disease is preventable.

- Deer ticks are most active from April through October, so exercise additional caution when venturing into tick country.
- When in a tick-infested area, a good prevention is an insect repellent; however, consider using a product designed to be applied to clothing rather than your skin.
- Tuck pants cuffs into boots or socks, and wear long sleeves and light-colored clothing which makes it easier to spot ticks.
- Stay to the center of hiking paths, and avoid grassy and marshy woodland areas.
- Inspect yourself and your children for clinging ticks after leaving an infested area. Deer ticks are hard to see—nymphs are dot-sized; adults, smaller than a sesame seed. If you discover a tick feeding, do not panic: studies indicate that an infected tick does not usually transmit the Lyme organism during the first 24 hours.
- If you suspect Lyme disease or its symptoms, contact your doctor immediately.

IN CASE OF AN EMERGENCY, first determine what the person was exposed to and what part of the body was affected before you take action, since taking the right action is as important as taking immediate action. If the person is unconscious, having trouble breathing, or having convulsions, give the indicated first aid immediately. Call 911 or your local emergency service. If these symptoms are not noticeable, contact your local Poison Control Center, physician, 911 or your local emergency service and follow their directions. *The following are general first aid guidelines:*

- **Poison in eye.** Eye membranes absorb pesticides faster than any other external part of the body. Eye damage can occur in a few minutes with some types of pesticides. If poison splashes into an eye, hold the eyelid open and wash quickly and gently with clean running water from the tap or a gentle stream from a hose for at least 15 minutes. If possible, have someone contact a Poison Control Center while the victim is being treated. Do not use eye drops, chemicals, or drugs in the wash water.
- **Poison on skin.** If pesticide splashes on the skin, drench area with water and remove contaminated clothing. Wash skin and hair thoroughly with soap and water. Later discard contaminated clothing or thoroughly wash it separately from other laundry.
- **Inhaled poison.** Carry or drag victim to fresh air immediately. If proper protection is unavailable, call the Fire Department. Loosen victim's tight clothing. Open doors and windows to prevent fumes from poisoning others.
- **Swallowed poison.** Induce vomiting **ONLY** if the emergency personnel on the phone tell you to do so. It will depend on what the victim has swallowed; some petroleum products, or caustic poisons can cause serious damage if vomited. Always keep Syrup of Ipecac on hand (1 bottle per household). Be sure the date is current and keep it out of children's reach.