

Insect Repellents Help Prevent Malaria and Other Diseases Spread by Mosquitoes



Every year, millions of U.S. residents travel to countries where malaria and other diseases spread by mosquitoes (mosquito-borne) are found. These diseases can cause serious illness and death in some cases. Preventing mosquito-borne infections is very important to staying well when you travel.

Why do I need to use an insect repellent when I travel to an area with malaria?

An insect repellent will help protect you from mosquitoes that spread malaria and other diseases, such as dengue, chikungunya, and Yellow fever. You can use an insect repellent on your skin and clothes to keep away (repel) insects.

Your doctor may also prescribe you a medication to prevent malaria (antimalarial drug).

Although antimalarial drugs are very effective, they are not 100% effective in preventing malaria. This is why you need to also use an insect repellent and take other steps to keep mosquitoes from biting you (mosquito avoidance).

In some areas where only a few cases of malaria occur, CDC recommends mosquito avoidance as the only way to prevent malaria.

Are insect repellents safe?

Most insect repellents that can be put on the skin must be registered by the U.S. Environmental Protection Agency (EPA) before they can be sold in stores.

EPA registration means the insect repellent has been tested and approved for human safety and is effective when used according to directions on the label. Before you buy an insect repellent, be sure to look on the label for EPA approval.

Which insect repellents will give me long-lasting protection against mosquitoes?

For hours of long-lasting protection, look for insect repellents with the following active ingredients:

- DEET
- IR3535
- Oil of lemon eucalyptus (OLE)*
- Picaridin (KBR 3023)

Some brand names of repellents include:

- **DEET products:** Off!, Cutter, Sawyer, Ultrathon.
- **IR3535 products:** Skin So Soft Bug Guard Plus Expedition, SkinSmart.
- **OLE products:** Repel, Off! Botanicals.
- **Picaridin products** (Autan, Bayrepel and icaridin outside U.S.): Cutter Advanced, Skin So Soft Bug Guard Plus.



**"Pure" oil of lemon eucalyptus (essential oil) is not recommended. It has not been tested by EPA for safety and effectiveness.

See a doctor or other healthcare provider 4-6 weeks before your trip to get any prescriptions, shots, and information you may need to stay healthy while you travel. Even if your trip is sooner, see a doctor to be safe.

For more information visit
CDC Travelers' Health website at
www.cdc.gov/travel

How do I use an insect repellent?

- Always follow directions on the label.
- Spray or rub the insect repellent onto your skin that is NOT covered by your clothes. Do not use under clothing.
- Use just enough insect repellent to cover your skin not covered by clothing. Heavy use of insect repellent or pouring it all over your body is not necessary.
- Never use insect repellents over cuts, wounds, or irritated skin.
- Do not spray insect repellents directly on your face—spray it onto your hands first and then pat the insect repellent onto your face.
- Do not spray or put insect repellents on your eyes or mouth, and put only a little around your ears.
- Use separate sunscreen and insect repellent products. Put the sunscreen on first, then spray on the insect repellent.
- After returning indoors, wash the insect repellent off your skin with soap and water or take a bath. This is especially important when you use insect repellents daily.
- Wash any clothes you treated with insect repellent before wearing them again.

Can I use an insect repellent if I am pregnant or breastfeeding?

Yes. Pregnant and breastfeeding women can use EPA-approved insect repellents. Always follow directions on the label.



Can I put insect repellent on my baby?

- Do not put insect repellent on babies younger than 2 months of age.
- Protect small babies under the age of 2 months by placing a fitted mosquito net around their infant seat or carrier. *See picture above.*

How do I put insect repellent on a child?

- Follow directions on the label.
- See directions for how to use an insect repellent on this page.
- Use no more than 30% DEET on a child.
- Do not use insect repellent with lemon eucalyptus on children under the age of 3 years.



What other things can I do to prevent mosquito bites?

- Wear a long-sleeved shirt, long pants, and a hat when you are outdoors.
- Spray insect repellent on your clothes for extra protection or buy a product with permethrin to treat your clothes and bed net to repel insects.
- Sleep in a well-screened or air-conditioned room, or sleep under a permethrin-treated bed net. This is because malaria mosquitoes mostly bite at night (dusk until dawn).
- Stay indoors during the times biting mosquitoes are most active.

Always spray insect repellents in open areas and wash your hands after using

What should I do if I develop a rash or reaction to the insect repellent?

- Stop using the insect repellent and wash the area with soap and water.
- If you see a doctor about the reaction, take the repellent container with you. You can also call the Poison Help Hotline at **1-800-222-1222**.

For more information:

Visit the EPA website at www2.epa.gov/insect-repellents

Check out the CDC malaria website at www.cdc.gov/malaria or call toll-free the CDC Malaria Hotline at **1-855-856-4713**