

Insect Repellent Fact Sheet

What is Insect Repellent?

Insect repellents are products used to prevent insects from biting you. The most common repellents are sprayed on your skin or clothes to keep insects off you. The U.S. Centers for Disease Control and Prevention (CDC) strongly suggests using an insect repellent registered by the Environmental Protection Agency (EPA) to prevent mosquito and tick bites. The EPA registers skin-applied repellents that are safe and effective to use when applied properly, including for children and pregnant women. The California Department of Public Health (CDPH) suggests using EPA-registered repellents with one of the following active ingredients because they provide longer-lasting protection against insect bites:

- DEET
- Picaridin
- IR3535
- Oil of Lemon Eucalyptus (OLE)
- Para-menthane-diol (PMD)

Repellents that have a higher percentage of an active ingredient will work longer to keep insects from biting you. Look for one of these active ingredients on the front or back of the insect repellent container and for information on the typical length of time the product will repel either mosquitoes or ticks.

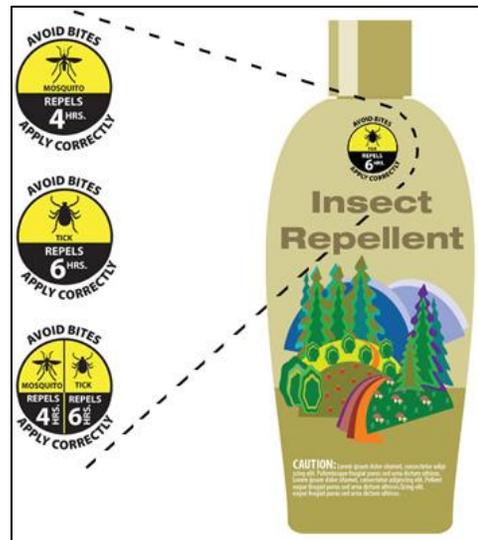


Image courtesy of [EPA](https://www.epa.gov/insect-repellents/repellency-awareness-graphic)
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Why Use Insect Repellent?

EPA-registered insect repellent, when used as directed by the product label, will help keep insects from biting you and protect against diseases like West Nile virus, Zika virus, and Lyme disease.

EPA-registered repellents are both safe AND effective to use when used as directed. Unregistered products may be considered by the EPA as safe to use, but they have not been tested to see how well they work to prevent insect bites. Unregistered products that are safe, but may not prevent against insect bites, include:

- Citronella oil
- Peppermint oil
- Soybean, cedar, and geranium oils

DO's and DON'Ts of Insect Repellent Use

DO:

- Read and follow label directions before applying repellent.
- Apply repellent to your face or your child's face by first spraying the product into your hands and then applying. Wash your hands before eating or drinking.
- Use if you are pregnant or breastfeeding; EPA-registered repellents are safe to use.
- If you are going outdoors in the sun, apply sunscreen first, wait 15 – 20 minutes, then apply repellent over the sunscreen.
- Reapply repellent if you get wet, will be outdoors for a long time, or if insects begin to bite.
- Be sure to use the most effective repellent to avoid bites from different types of insects. Products are available that protect against tick bites, mosquito bites, or both.
- Wash your clothes and bathe after using insect repellent and returning indoors.

DON'T:

- Spray or apply repellent near your eyes, nose, mouth, ears, or on open cuts.
- Spray or apply repellent under clothing.
- Use insect repellent on babies younger than 2 months.
- Use oil of lemon eucalyptus or para-methane-diol on children under the age of 3 years.
- Allow children to apply insect repellent themselves.

Where Can I Buy Repellent with EPA-registered Ingredients?

Insect repellent can be found in most stores selling personal, home, and garden supplies. Common brand names of EPA-registered insect repellents include: OFF!, BugX, Cutter, and Guard Wipes.

Note: CDPH does not endorse any specific brand name products.

Resources

To find an insect repellent that is right for you, use the [online EPA insect repellent search tool](https://www.epa.gov/insect-repellents/find-insect-repellent-right-you) (https://www.epa.gov/insect-repellents/find-insect-repellent-right-you). For more information, visit the [EPA's repellent website](https://www.epa.gov/insect-repellents/regulation-skin-applied-repellents) (https://www.epa.gov/insect-repellents/regulation-skin-applied-repellents) and the [CDC's repellent information webpage](https://www.cdc.gov/westnile/faq/repellent.html) (https://www.cdc.gov/westnile/faq/repellent.html).

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