



[Home](#) → [Medical Encyclopedia](#) → Bug repellent safety

URL of this page: [//medlineplus.gov/ency/article/001969.htm](https://medlineplus.gov/ency/article/001969.htm)

Bug repellent safety

A bug repellent is a substance that is applied to the skin or clothing to protect you against biting insects.

Information

The safest bug repellent is to wear proper clothing.

- Wear a full-brimmed hat to protect your head and the back of your neck.
- Make sure your ankles and wrists are covered. Tuck pant cuffs into socks.
- Wear light-colored clothing. Light colors are less attractive than dark colors to biting insects. It also makes it easier to spot ticks or insects that have landed.
- Wear gloves, particularly while gardening.
- Check clothes regularly for bugs.
- Use protective netting around sleeping and eating areas to keep bugs at bay.

Even with proper clothing, when visiting an area with many insects, bug repellents such as those containing DEET or picaridin should be used.

- To avoid skin irritation, apply insect repellent to clothing. Test the repellent on a small, hidden area of clothing first to see if it will bleach or discolor the fabric.
- If areas of your skin are exposed, apply repellent there as well.
- Avoid using directly on sunburned skin.
- If using both sunscreen and repellent, apply sunscreen first and wait 30 minutes before applying repellent.

To avoid toxicity from insect repellents:

- Follow label instructions on how to use the repellent.
- Do not use on infants under 2 months of age.
- Apply repellent sparingly and only to exposed skin or clothing. Keep out of eyes.
- Avoid using high-concentration products on the skin, unless there is a high risk of disease.
- Use a lower concentration of DEET (under 30%) on pregnant women and small children.
- Do not breathe in or swallow repellents.

- Do not apply repellent to children's hands because they are likely to rub their eyes or put their hands in their mouth.
- Children age 2 months to 2 years old should not have insect repellent applied to their skin more than once in 24 hours.
- Wash repellent off the skin after the risk of being bitten by an insect is gone.

Alternative Names

Insect repellent safety

References

Fradin MS. Insect protection. In: Keystone JS, Kozarsky PE, Connor BA, Nothdurft HD, Mendelson M, Leder K, eds. *Travel Medicine*. 4th ed. Philadelphia, PA: Elsevier; 2019:chap 6.

United States Environmental Protection Agency website. Repellents: protection against mosquitoes, ticks and other arthropods. www.epa.gov/insect-repellents [https://www.epa.gov/insect-repellents]. Updated August 24, 2022. Accessed May 24, 2023.

Review Date 4/28/2023

Updated by: Neil K. Kaneshiro, MD, MHA, Clinical Professor of Pediatrics, University of Washington School of Medicine, Seattle, WA. Also reviewed by David C. Dugdale, MD, Medical Director, Brenda Conaway, Editorial Director, and the A.D.A.M. Editorial team.

Learn how to cite this page



A.D.A.M., Inc. is accredited by [URAC](https://www.urac.org), for Health Content Provider (www.urac.org). URAC's [accreditation program](#) is an independent audit to verify that A.D.A.M. follows rigorous standards of quality and accountability. A.D.A.M. is among the first to achieve this important distinction for online health information and services. Learn more about A.D.A.M.'s [editorial policy](#), [editorial process](#), and [privacy policy](#).

The information provided herein should not be used during any medical emergency or for the diagnosis or treatment of any medical condition. A licensed medical professional should be consulted for diagnosis and treatment of any and all medical conditions. Links to other sites are provided for information only – they do not constitute endorsements of those other sites. No warranty of any kind, either expressed or implied, is made as to the accuracy, reliability, timeliness, or correctness of any translations made by a third-party service of the information provided herein into any other language. © 1997-2025 A.D.A.M., a business unit of Ebix, Inc. Any duplication or distribution of the information contained herein is strictly prohibited.

