

# Why do mosquitoes always bite *me*?

It has to do with how you smell, but scientists still don't know why some breeds are attracted to different smells, said Jason Pitts, professor of biological sciences at Vanderbilt University.

The source of the aromatic compounds that produce body odor are bacterial colonies that exist on human skin, particularly in dark, moist areas such as the armpits and between the toes. Pitts and his colleagues have discovered that mosquito antennae are filled with hundreds of tiny odor receptors, which are individually tuned to detect specific odors.



Just as mosquitoes may love you, they may not love natural repellants such as clove oil, citronella, lemon grass, eucalyptus, castor oil, peppermint, lavender, and cedar oil. But almost all of these are less effective than the synthetic repellant DEET, and they need to be reapplied more frequently.

Bet you didn't know these pesky insects have a long-range system that allows them to track down potential prey from more than 100 yards away. The mosquitoes do so, in part, by sensing the carbon dioxide in human breath. When we exhale, our breath contains more carbon dioxide than the surrounding air, and mosquitoes can detect this difference—especially if you've had a beer or other alcoholic drink.

## To avoid mosquito bites, CDC gives the following advice:

- Use an insect repellant when you go outdoors. The FDA approves ones with DEET, picaridin, IR3535, and oil of lemon eucalyptus. Follow the product label's directions.
- As much as possible, wear long sleeves, long pants, and socks. For extra protection, spray clothes, not your skin, with repellant that contains permethrin.
- Avoid outdoor activities from dusk to dawn or take extra care to use insect repellant and protective clothing during these times.
- Keep mosquitoes outside the house. Use screens on windows and doors or use air conditioning.
- On a regular basis, empty water that collects in outdoor buckets, flowerpots, pool covers and bird baths. Mosquitoes like stationary water.