

Mosquito “magnet”: Why pests might be picking on you

During “mosquito season,” which in the continental U.S. lasts typically from late spring to early fall, when mosquito activity is highest, it may seem like mosquitoes are drawn to some people more than to others. Speculations about the potential causes of this “mosquito affinity” range from differences in blood types, hormones, skin care products or diets we follow.

This week, the entomologists and mosquito experts at OFF!® weighed in on what makes some people more “attractive” to mosquitoes. Guess what: it all comes down to biology. Mosquitoes don’t care about the sweet summer beverages we drink or the skin products we apply —they’re drawn to the air we exhale and the sweat on our skin.

“Carbon dioxide is the primary chemical that mosquitoes are detecting, and we emit carbon dioxide every time we exhale,” said Julie Palm, a researcher at SC Johnson. “They use the carbon dioxide as a way to detect humans up to 50 feet away. As they get closer, they’ll begin to use other cues like sensing lactic acid.”

After mosquitoes find their way closer to us, they can sense the lactic acid that we secrete through our skin, our sweat and even subtle body movements. Mosquitoes can detect any areas of our body where we haven’t applied personal repellent, especially if we’re emitting a higher level of these substances.

When we’re active, we’re likely to breathe more heavily and sweat more intensely, thus making ourselves more detectable to mosquitoes.

“Our breathing patterns, body temperature and tendency to sweat can vary depending on where we are and what we’re doing, so in any given circumstance, the same person could be more or less ‘attractive’ to mosquitoes,” said Maude Meier, Ph.D., scientist at SC Johnson. “It’s important to be aware of these factors, but the best way to make sure you’re fully protected is to apply personal insect repellent across all exposed body parts.”

Meier added that your blood type, what you ate for dinner the night before, your age, your gender or any scented products you use on your body are not going to be the factors that attract mosquitoes to you. Carbon dioxide, lactic acid, water vapor and body heat are the main players. In addition, elevated body heat may be the reason some pregnant women are more “attractive” to certain mosquito species.

“There is some evidence that certain mosquito species can be slightly more attracted to pregnant women, like some *Anopheles* species,” Meier said. “The thinking is that it probably has something to do with their increased body temperature.”

There are approximately 430 *Anopheles* species of mosquitoes. *Anopheles* can be found worldwide, except Antarctica, but they prefer regions with warm temperature, humid conditions and high rainfall.

Whether you're a "mosquito magnet" or not, our entomologists recommend using personal repellents that contain EPA-approved active ingredients, like DEET or Picaridin, to avoid mosquito bites. Products with these ingredients are designed specifically to create a vapor barrier on the skin's surface that deters mosquitoes from landing on the skin or biting us.