

# This Is Why Mosquitoes Target Some People Way More Than Others

Hilary Duff recently posted an all-too-relatable Instagram photo of herself covered in mosquito bites. Here, experts explain why the suckers seem especially drawn to certain people.



Mosquitoes are enemy No.1 these days thanks to Zika virus—and the simple fact that they enjoy chomping on humans. But during prime mosquito season, some people notice that they get bitten more than others. Apparently Hilary Duff is one of them: The actress recently posted a photo on Instagram of her back and arms covered in welts with the caption, “mosquitoes had a feast.”

We've all seen it before: The person next to you gets bitten like crazy by mosquitoes while you remain basically unbiten, or vice versa. So, do mosquitoes actually prefer some people over others?

Yes, Ron Harrison, Ph.D., Orkin entomologist (a person who studies insects), tells SELF. "There are certainly cues that mosquitoes use to target people," he says.

Here, Hilary Duff with a good example of what that looks like:



We can't say for sure why the bugs love Duff, but experts have some general thoughts about why mosquitoes are more drawn to some people than others.

Mosquitoes love sweat, Harrison says, and if you're perspiring more than the person next to you, they're going to home in on you.

Body odor can also attract mosquitoes, entomologist Roberto M. Pereira, Ph.D., a research scientist with the University of Florida, tells SELF. "Just like we would smell a person who hasn't taken a bath recently a little bit more, mosquitoes will use their antennae to 'smell' certain things in body odor, and [they're] attracted to it," he says.

They're particularly into lactic acid, a common chemical in B.O., as well as uric acid and ammonia, which can be released by bacteria that live in your skin, entomologist Whitney Qualls, Ph.D., a research scientist at the University of Miami, tells SELF. Mosquitoes also dig carbon dioxide (which we exhale), Harrison says. Smaller people give off less CO2 than larger people, so that may factor in.

There's even some evidence that mosquitoes are drawn to a particular blood type. One small study published in the *Journal of Medical Entomology* found that, in a controlled setting, mosquitoes landed on people with Type O blood almost twice as often as they did on people with Type A blood. (Those with Type B blood were somewhere in the middle.)

Many sweet-smelling perfumes can also be an issue, Gary Goldenberg, M.D., medical director of the Dermatology Faculty Practice at the Icahn School of Medicine at Mount Sinai, tells SELF, although some can actually act as repellents (recently researchers at New Mexico State University found that mosquitoes are actually turned off by Victoria's Secret perfumes).

But some of it could just be genetics. Qualls points out that research has found that a person's genetic makeup can account for up to 85 percent of the various factors that make them attractive to mosquitoes.

Of course, just because you don't have angry welts on your skin after spending time outdoors doesn't mean you're not getting bitten. "The actual bite of the mosquitoes can be innocuous," points out Goldenberg. "But most people produce an allergic reaction to mosquitoes by releasing histamine—a chemical that causes itching and hives." People with sensitive skin are more likely to release more histamine and have a stronger response, he adds.

You can lower your risk of getting bitten by wearing a good mosquito repellent when you head outdoors and reapplying often. Pereira recommends ones that contain DEET, although he says ones that contain Picaridin have also been found to be effective.

Harrison also recommends being especially cautious at dawn and dusk when many mosquitoes are the most aggressive, and wearing loose clothing during those times since mosquitoes will bite through tight clothes.

Keep these factors in mind, and you have a better chance of making it through summer relatively unscathed.