

# A clip-on repellent device offers protection against *Aedes aegypti* mosquitoes

February 2 2016, by Josh Lancette

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A product called the OFF! Clip-On repellent device could be an effective tool for preventing bites from the *Aedes aegypti* mosquito—the primary vector of Zika, chikungunya, dengue, and yellow fever—according to an article in the *Journal of Medical Entomology*.

The OFF! Clip-On repels mosquitoes by releasing a vapor form of insecticide through a battery-powered fan, forming an insecticide "cloud" around the wearer of the [device](#). In order to test the effectiveness of the device, Christopher Bibbs and Rui-De Xue of the Anastasia Mosquito Control District in Florida studied how the device performed against hungry *Aedes aegypti* mosquitoes. The study was done outdoors in order to replicate real-world conditions.

They found that the OFF! Clip-On caused high mosquito mortality and knockdown rates up to 0.3 meters from the device, enough to protect a single person wearing the device.

The effectiveness of the device came as a pleasant surprise to the researchers.

"In vector control, we see more often than not that tools available for consumers don't work for the intended purpose," said Bibbs. "Just look at all the bug zappers, repellent bracelets, sonic bug repellents, and other zany creations that wax and wane in popularity. Skepticism is inherent to the trade. But it was nice for a change of pace that one of these devices could actually do some good."

**More information:** Christopher S. Bibbs et al. OFF! Clip-on Repellent Device With Metofluthrin Tested on (Diptera: Culicidae) for Mortality at Different Time Intervals and Distances , *Journal of Medical Entomology* (2015). [DOI: 10.1093/jme/tjv200](https://doi.org/10.1093/jme/tjv200)

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