

Bed bugs: Proactive pest management critical in multi-unit housing

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Amid the persistent threat of bed bug infestations in multi-unit housing, the best advice for property owners, managers, and tenants looking to avoid the pests is the same advice that applies to many other afflictions: an ounce of prevention is worth a pound of cure.

So says an extensive review of existing research into management strategies for bed bugs, published this week in the Entomological Society of America's *Journal of Integrated Pest Management (JIPM)*. The free, open-access report examines dozens of field studies on bed bug management and concludes that "programs that consider the residents, housing managers, and staff and attempt to detect infestations before they are reported and before populations spread to multiple units stand the best chance at succeeding."

Multi-unit housing such as assisted living facilities and affordable housing communities are particularly vulnerable to bed bug (*Cimex lectularius*) infestations, and research shows that the most common [management strategies](#) in these settings rely mostly on application of insecticides. These reactive methods are often costly and are not always successful, says Alvaro Romero, assistant professor of urban entomology at New Mexico State University and lead author of the JIPM report.

"We consider early detection and regular monitoring to be the most important components of successful integrated pest management (IPM) programs for bed bugs in multi-unit housing," Romero says.

A multi-pronged IPM approach to bed bug management includes a variety of nonchemical methods—such as clutter reduction, mattress and box spring encasements, steam treatment, heat treatment, vacuuming, laundering, and placement of bed bug traps and monitors—all of which "help to reduce risks associated with chemical methods, such as pesticide exposure events and insecticide resistance development," says Romero, who wrote the JIPM report with a team of researchers from University of California Cooperative Extension; UC Riverside; UC Berkeley; University of Arizona; University of Hawaii at Manoa; and Colorado State University.

Part of the challenge faced in managing bed bugs in multi-unit [housing](#) is the need to continually educate tenants on bed bug prevention and identification. Past studies that Romero and colleagues reviewed on the public's ability to identify a bed bug correctly consistently showed low percentages of people able to do so.

Meanwhile, property owners and managers are advised to weigh the investment in ongoing, preventative [management](#) methods against the risk of costly control efforts necessary once an infestation has occurred.

"Although proactive IPM approaches for bed bugs may initially generate substantial additional costs, these long-term programs may eventually make economic sense as the best ways to effectively manage [bed bugs](#) in these challenging environments," says Romero.

More information: A. Romero et al, Pest Management Strategies for Bed Bugs (Hemiptera: Cimicidae) in Multiunit Housing: A Literature Review on Field Studies, *Journal of Integrated Pest Management* (2017). [DOI: 10.1093/jipm/pmx009](https://doi.org/10.1093/jipm/pmx009)

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