

HOT 'N COLD: A Professional's Approach to Treating Bed Bug Infestation



Arthur Katz
January 2011

HOT 'N COLD: A Professional's Approach in Treating Bed Bug Infestation. By Meg Forthman

There is so much in the news and online on how to treat a bed bug infestation. To clarify things and help explain the current trends in using Heat Technology versus Freezing Technology in eliminating bed bugs, we asked a leading New York pest control and bed bug expert Arthur Katz, from Knockout Pest Control, to review the currently approved processes, as well as explaining the Heat and Freezing treatment methods.

“First”, says Arthur, “always call a pest control professional to deal with a Bed Bug problem. A pest control professional has the specialized equipment, the approved and licensed pesticides, the expert knowledge of how to use them safely, and has the expertise of how to locate and eliminate Bed Bugs.”

“The areas of Bed Bug infestation have to be determined”, continued Arthur Katz, “using basic visual inspection of mattresses, bed frames, carpets, night stands, behind wall decorations, and other places where Bed Bugs are known to hide; then we have to find the Bed Bugs that can't be seen. This secondary means of detecting Bed Bug usually involves a method of “sniffing” them out. The most popular and proven effective is using a certified Bed Bug dog, with an experienced handler. Dogs can sniff out a scent as faint as 500 parts per trillion. Dogs can detect a Bed Bug within a room in minutes, within a couple of inches. Electronic sniffing devices have recently been developed to sense the presence of the CO2 signature emitted from Bed Bugs after a blood meal. Although a revolutionary innovation, its ability to locate Bed Bug eggs and Bed Bugs that have not fed recently is in question. Some ask which method, dog versus machine is better? There is no question however regarding the effectiveness of dogs to locate just about anything using their sense of smell. Laboratory and field tested dogs not have only been proven effective in finding drugs and explosives, plus were able to detect someone with diabetes or with some forms of cancer. Unlike a machine, dogs have intelligence that allows them to evaluate and make determinations regarding the scents they smell, resulting in an almost perfect 99 percent plus accuracy rate. Dogs are the current Bed Bug industry standard.”

“Once locating the area of infestation, a physical removal of visible Bed Bugs from an infested area is required, manually and with deep vacuuming.” Then comes the methods of treating the Bed Bug infestation,” continues Arthur Katz, “there are two: Heat and Freezing but both also include an application of a residual pesticide.”

“The use of a residual pesticide is a must” says Arthur emphatically. “ However, what pesticide, where it's applied, and how much is applied is extremely important not only to effectively treat the area and affect Bed Bugs who may have some way escaped the other treatment or are introduced into an area after treatment. That's why using a licensed professional is so important.”

“Which brings us to the use of HEAT or COLD to kill Bed Bugs; both are effective means of killing Bed Bugs. Bed Bugs like most insects have the capacity to develop resistance to pesticides. The pest control industry continually develops alternate methods of eradicating pests. Because environment plays a big

part in the biology of insects they are sensitive to extremes in temperature; which is why the pest control industry has moved to using Heat and Freezing Cold. It's effective, its greener, safer, and very effective approach to killing Bed Bugs. Both techniques are highly effective, but each method has its optimal operating environment for maximum effectiveness."

"Dry heat, 120 to 130 degrees, is enough to kill bed bugs when Bed Bugs are exposed to these temperatures for at least 30 minutes. This process works best when the area being treated is containable. It takes hours or days, for the heat to reach 120 degrees, and in an entire room, apartment, or house; so Bed Bugs have time to escape and seek refuge elsewhere. Dry heat works best in small contained areas, like a sealed tented system for killing Bed Bugs in cars, or the use of a Bed Bug Hot Box. A Bed Bug Hot Box is a container, large enough to fit a piece of carry-on luggage, but can be used for clothes, shoes, bedding, books and even electronic devices. Many people who have had Bed Bug infestations or are frequent business travelers get a Bed Bug Hot Box to help prevent Bed Bug infestation or re-infestation. There are several on the market, simply Google "Bed Bug Hot Box" to find a company that sells them."

"Steam Heat, is also effective, but in my experience, what I've seen, the destructive nature of wet steam is too damaging to use in most residential applications. Bed Bug control using steam is usually used in commercial and industrial applications."

"Freezing cold, in rapid application, is the most highly effective in killing Bed Bugs on contact - from eggs, to nymphs, to adults. The blast of freezing CO2 kills Bed Bugs before their metabolism can adapt to the freezing temperature. In nature, insects adapt to slow freezing, but the CO2 freezes them so rapidly and completely that they can't go into what we call the 'super-cooling antifreeze' mode; when insects shed body fluid to adapt to the freezing. Bed Bugs die from becoming crystallized instantaneously. The CO2 freezing gets deeply into spaces, able to permeate under baseboards and even electrical wall outlets; reaching Bed Bugs within wall voids. Because the freezing process is a dry cold, it does not damage fabric, wood, or other delicate surfaces. The freezing method can also be used on electronic devices, like clock radios and computers, as long as they are unplugged and are turned off."

I would like to thank Bed Bug expert Arthur Katz for offering these firsthand professional insights on the topic of Bed Bug control and treatment methods.

ARTHUR M. KATZ
KNOCKOUT PEST CONTROL, INC.
800-244-7378
AKATZ@KNOCKOUTPEST.COM
WWW.KNOCKOUTPEST.COM