



Pest Control News Bites

"SLEEP TIGHT"

Don't Let The Bed Bugs "Bite" You By Suffering Heat Damage Claims That Can Be Avoided!



Spring 2011

Re-emerging Pests:

It is widely believed the saying, "Sleep tight don't let the bed bugs bite" originated during Civil War times when soldiers slept on hammocks tied between two trees or posts. Tight referred to the twisting of the fabric the hammock was constructed of, which in essence "trapped" bed bugs in the hammock twine, keeping them from taking a blood meal from the resting soldier. Today, with the resurgence of this ghastly pest, customers don't want to give much consideration to ANYTHING but DEATH to the bed bugs. The thought of merely trapping the bugs in the mattress drives some customers away.

Difficult To Eradicate:

Bed bugs are small, nocturnal, and effective at hiding for weeks at a time in difficult to reach places in homes. It is difficult, if not impossible, to apply chemical pest products that will reach the entire live population, and residual products have not been effective on eggs since the elimination of DDT. In the past heat treatment was used against termites and recently it has been emerging as an effective treatment against bed bugs. All arthropods have a "thermal death point," which for live bed bugs is 115 degrees Fahrenheit. Temperatures between 113 and 122 degrees over a period of time will also kill live bugs and eggs. To increase the chances of effective treatment in a minimal number of visits, it should be the goal of the pest control company to raise the ambient temperature of the dwelling to 140 degrees Fahrenheit for over 5 minutes. This is intended to allow for full permeation of the lethal heat into the tiny spaces bed bugs hide.

Challenges To Using Heat Treatment:

As with ALL forms of pest control there are risks of damage from the chosen treatment method. Heat treatment for bed bugs is no different, but since it has changed over time with improved technology, managing the risks of using heat treatment is possible. The key to managing the risks associated with heat treatment is a thorough inspection of the premises and the contents before beginning work.

Here are some brief risks of loss associated with heat treatment and recommended management of those risks:

Residential Fire Sprinkler Systems:

Many sprinkler heads of fire suppression systems installed in homes are designed to activate at temperatures between 135 and 155 degrees Fahrenheit. Some homes may have older model sprinkler heads with lower activation temperatures. To manage this risk of setting off sprinkler heads, operators of heat treatment systems must be systematic in their approach to the job. Check the temperature rating of the sprinkler heads. Make sure the thermostat on the heat treatment equipment is accurate. Consider insulating the sprinkler heads from heat using designed covers.

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Sensitive Electronic Equipment:

Most electronic equipment withstands heat to temperatures that would allow it to stay in the room being treated, as long as it's not too close to the heat source. When dealing with the risk of heat-damage to electronics, the old saying, "Knowledge is power" applies. Heat damage to electronics can be avoided by not allowing the junctions of semiconductor devices to exceed their rated maximum junction temperature listed on their data sheets. If your customer doesn't have their data sheets most can be found on the manufacturers' websites. Knowing the "danger" temperature can help you make an informed decision as to whether or not you require the owner to remove the equipment before the treatment begins. Keep in mind that removing the equipment carries the risk of bringing live bed bugs, which may be hiding in the equipment, back into the room that was treated.

Sensitive Collectibles:

Some people will collect just about anything and to them their collections are valuable, whether or not there is significant monetary value in the items. Some of these collectibles may be sensitive to heat. Some examples include vinyl records, candles, photographs, wine, perfume and similar items. Personal decisions need to be made by the owner as to whether or not they believe the items can withstand the heat. The operator should not be too quick to offer an opinion on something withstanding heat treatment without being damaged.

Conclusions:

Bed bugs will become a much larger problem over time than they are presently. They are difficult to control and pest control operators will need education and determination to become effective at bed bug elimination.

It appears heat treatment will increase in popularity to attempt to control bed bugs. There will be more demand for PCO to use heat treatment in bed bug elimination because it provides the best chance for quick control.

Exposures to loss from the heat treatment process can be controlled through proper training, equipment maintenance, and customer education. The following "Best Practices" for operators should be adapted if they will use heat treatment:

- Operator training and education on equipment use and bed bug entomology
- Strict adherence to equipment manufacturers recommendations on customer education before a heat treatment, i.e. making educated decisions regarding removing perishables and items susceptible to heat damage
- Use of temperature monitoring systems according to manufacturer recommendations during heat treatment processes
- Elimination of equipment not specifically designed for thermal treatment to control insects



Don't let the bed bugs "bite" you by suffering heat damage claims that can be avoided. Instead know the risks and practice sound management of those risks through a systematic approach. If you have any questions or comments on heat treatment for bed bugs, contact **Bill Coons** at **1-888-546-4042** or by e-mail at **Bill.Coons@Thomcoins.com**.