Bed Bug Prevention 2010 Update



Muers

If simply the thought of bedbugs, scabies and head lice makes you feel a little itchy, imagine how those affected by these common infestations feel when they learn what has been creeping around them and causing symptoms such as intense itching, red bite marks or irritated scalps. Even less comforting is the fact that some parasitic infestations are on the rise, and can strike adults and children in unsuspecting places.

Bedbugs are hardy insects and can go as long as six to 12 months between feedings in times when their food supply is scarce. They commonly are found along the seams of mattresses or box springs, behind headboards, or in other small dark spaces. When bedbugs bite, people may experience intense itching that can be hard to relieve.

To avoid bedbugs, it is recommended that individuals check their hotel room before unpacking, especially along the seam of the mattress and in the bed sheets and linens. Never put your suitcase on the floor and if you are using the luggage rack in the room, check it thoroughly for signs of bugs. Once home, wash or dry clean your items immediately and check your suitcase for any signs that you have brought the bugs back with you.

In the Headlines on almost every major news network, bed bugs have taken our country by surprise, shockingly these nasty pest can be almost anywhere. Hotels, motels, bed & breakfast, resorts, nursing homes, movie theatres, schools, restaurants, hospitals, kennels and other places.

Bed bugs lay up to 500 eggs over the course of their lifespan and easily migrate from bed to bed, room to room and person to person.



Don't Let The Bedbugs Bite

In 2007, less than one percent of exterminators in the United States reported finding bedbug infestations in office buildings; today the statistics approach 20 percent. Reports of the insects infiltrating hotels, movie theaters and commercial properties are making headlines in big cities and small towns alike. And with headlines comes litigation, not to mention a faltering facility reputation and downright panic among building occupants. So how should facilities managers protect their properties? What happens if you discover an infestation? Can an infestation be prevented? Find out when you attend "Don't Let the Bedbugs Bite: Advice on Limiting Liability, Calming Occupants and Responding to an Infestation" on Monday, **September 20, at 1 p.m. Eastern.**

This 60-minute webcast will discuss recent research findings relating to this resurgent pest, current bed bug litigation, the public's perception of the issue, as well as both proactive and reactive steps that you can take to limit your own liability.

"Don't Let the Bedbugs Bite: Advice on Limiting Liability, Calming Occupants and Responding to an Infestation" will help you to:

- Learn how to identify bedbugs and their health risks
- Understand how an infestation begins and spreads

Myers

- Examine current case law and federal/state regulations regarding bedbug infestations
- Review ways to create a response plan for your facility

More Information at http://www.facilitiesnet.com/webinar/Bedbugs2010

CDC and EPA Issue Joint Statement on Bed Bug Control

The Centers for Disease Control and Prevention (CDC) and the U.S. Environmental Protection Agency (EPA) developed a document highlighting emerging public health issues associated with bed bugs.

The U.S. is one of many countries now experiencing an alarming resurgence in the population of bed bugs. Though the exact cause is not known, experts suspect the resurgence is associated with increased resistance of bed bugs to available pesticides, greater international and domestic travel, lack of knowledge regarding control of bed bugs due to their prolonged absence, and the continuing decline or elimination of effective vector/pest control programs at state and local public health agencies.

In recent years, public health agencies across the country have been overwhelmed by complaints about bed bugs. An integrated approach to bed bug control involving federal, state, tribal and local public health professionals, together with pest management professionals, housing authorities and private citizens, will promote development and understanding of the best methods for managing and controlling bed bugs and preventing future infestations. Research, training and public education are critical to an effective strategy for reducing public health issues associated with the resurgence of bed bug populations.



Control bed bug infestations can be challenging because:

- Local public health departments have very limited resources to combat this problem and bed bugs frequently are not seen as a priority.
- Pesticide resistance and limited control choices make treatment even more difficult. Some bed bug populations are resistant to almost all pesticides registered to treat them. Building owners may use over-the-counter or homemade preparations that are ineffective (or even dangerous) and may promote further resistance.
- Pesticide misuse is also a potential public health concern. Because bed bug infestations are so difficult to control and are such a challenge to mental and economic health, building owners may resort to using pesticides that are not intended for indoor residential use and may face serious health risks as a result. Additionally, building owners may be tempted to apply pesticides registered for indoor use, but at greater application rates than the label allows. This results in a much greater risk of pesticide exposure for those in the building. Pesticides must always be used in strict accordance with their labeling to ensure that the residents and applicators are not exposed to unsafe levels of pesticide residues.

Integrated Pest Management for Bed Bugs

The current national problem with bed bugs is likely due to the convergence of three human behaviors: lack of awareness of the historical and biological link humans have with bed bugs, increased international travel, and past over-reliance on pesticides. Bed bugs are a "nest parasite" that resides in the human nest – the bedroom. Over time, bed bugs have evolved to develop resistance to many of the chemical pesticides currently used. In fact, bed bugs were widely resistant to DDT by the mid-1950s. Integrated pest management (IPM) is an effective and environmentally sensitive approach to pest management that relies on a combination of common-sense practices. IPM programs use current, comprehensive information on the life cycles of pests and their interaction with people and the environment. This information, in combination with available pest control methods, is used to manage pest damage by the most economical means, and with the least possible hazard to people, property, and the environment.

Bed bug control is most effective when an IPM approach is implemented with diligent participation by the residents. IPM takes advantage of all appropriate pest management options, including the judicious use of pesticides. Although bed bugs may sometimes be controlled by non-chemical means alone, this approach is often very difficult, potentially less effective, and usually more resource intensive. A comprehensive IPM program to control bed bugs may include a number of methods such as:

- using monitoring devices,
- removing clutter where bed bugs can hide,
- applying heat treatment,
- vacuuming,
- sealing cracks and crevices to remove hiding places,
- using non-chemical pesticides (such as diatomaceous earth) and
- judicious use of effective chemical pesticides



The underlying philosophy of bed bug IPM is based on the fact that bed bug infestations will not go away without intervention. Intervention is most effective when populations are low. Such a coordinated effort could create a partnership among government, property managers, citizens, and pest management professionals to ensure an effective intervention facilitated by environmental health professionals. EPA and CDC recommend that pest management and environmental health professionals throughout the U.S. continue to use IPM strategies as they address the bed bug issue.

Bed Bug Insecticide

Lice Killer

This powerful lice killer insecticide contains active ingredients that is designed to kill adult lice and lice nymphs as they hatch, dust mites, ticks fleas and **bedbugs** by killing them on inanimate surfaces.

Safe to use on items such as: Floors, Carpeting, Mattresses, Bedding, Garments, Sports Gear, Furniture, Baseboards, Walls and Headboards.





EcoSMART's technology is based on the natural defenses that plants and trees have used for their self protection against insects and pathogens for centuries – essential oils. EcoSMART Technologies is the first company to put real science behind botanical technology to enhance both the performance and economics that has enabled a realistic shift from conventional to botanical insecticides in the commercial and industrial markets. EcoSMART's Commercial Insecticide aerosols meet today's customer demands for performance, safety, cost effectiveness... and green! The patented blends of plant oils in the active ingredient target insects to quickly kill and control a broad spectrum of crawling and flying insects... yet are safe around people and the environment. Finally, there is a green insecticide that is effective and safe!

EcoSMART Commercial Crawling Insect Killer

For control of ants, **bedbugs**, carpet beetles, carpenter ants, centipedes, clover mites, cockroaches, crickets, drug store beetles, earwigs, elm leaf beetles, fleas, millipedes, pillbugs, scorpions, silverfish, spiders, termites and other crawling insects.



Unlike vacuuming, steam cleaning is generally very effective at killing any bed bugs or eggs that come into contact with it. Extreme heat will kill them quickly (anything over 120 degrees Fahrenheit or so), and most steamers will exceed this temperature. You will probably need to get a commercial steamer, because you will need to run it for awhile and cover most areas in your bedroom. You will want to make sure you cover all the areas they could be hiding, even inaccessible ones.

- 1. Pick up all trash and clutter from your bedroom. (This gives the bed bugs fewer places to hide.)
- 2. Wash and dry all bed linens and clothing. Store them in plastic bags and containers to prevent re infestation.
- 3. Vacuum the carpets, furniture, mattress, and box springs to get rid of dust and debris.
- 4. Fill the receptacle on the steam cleaner with the directed amount of water and cleaning solution, as per the manufacturer's instructions.
- 5. Slowly go over surfaces with the steam cleaner to sanitize the areas and kill bed bugs. Start from the top of the room and work downward. Begin by steam cleaning curtains and drapes. Work your way to the bed and other furniture.
- 6. Allow the steam cleaned surfaces to dry thoroughly.
- 7. Wrap the mattress, box springs, and any furniture in tear-resistant plastic coverings, if possible. Leave the plastic on for two weeks to ensure that any living organisms have had time to die.
- 8. Examine the bedding, furniture, and other bedroom fixtures carefully for bed bug feces, skins, or living bugs. If any are found, repeat the steam cleaning process.

The **JS 1600c** incorporates stainless steel boilers ensuring consistent steam pressure. The cleaning power of steam attacks bugs, grime and mold leaving the surface sanitized. The pump is connected to the water reservoir for a constant supply of water and unlimited working capacity. Operator safety is assured by the many safety features including 12V steam controls, pressure switch, thermostat, high limit thermal shut off and pressure relief valve.

With its consistent and continuous flow of steam the JS 1600c is an excellent choice for cleaning carpets and upholstery. You simply cannot over wet fabric and it is safe to use on just about any fabric or surface. It also cleans grouted floors, showers, kitchens and any area where detail cleaning is a challenge. It is also excellent in hotel rooms for spotting draperies, bed spreads, and carpets. It will even kill bedbugs on a hotel mattress.



What's A Bed Bug Look Like?

The two most common species of bed bugs implicated in human infestations are *Cimex lectularius* and *C. hemipterus*; the former of which is cosmopolitan, and the latter being found mostly in the tropics and sub-tropics. Adults are on average 5 mm long, oval-shaped and dorso-ventrally flattened. Like other members of the order, Hemiptera, they possess piercing-sucking mouthparts. Adults are brachypterous; the hindwings are nearly absent and the forewings are reduced to small, leathery pads. Nymphs look like smaller, paler versions of the adults. While *Cimex* spp. have been found to be naturally-infected with several blood-borne pathogens, they are not effective vectors of disease. The primary medical importance is inflammation associated with their bites.



Adults and all nymphal stages of *Cimex* spp. need to take blood meals from warm-blooded hosts, which are typically humans for *C. lectularius* and *C. hemipterus*, although other mammals and birds can be utilized in the absence of a human host. Female bed bugs lay about five eggs daily throughout their adult lives in a sheltered location (mattress seams, crevices in box springs, spaces under baseboards, etc). Eggs hatch in about 4-12 days into first instar nymphs which must take a blood meal before molting to the next stage. The bugs will undergo five nymphal stages each one requiring a blood meal before molting to the next stage, with the fifth stage molting into an adult.



Myers Chemical & Supplies Get more product info at: www.Go2MyersSupply.com