If You Can't Stand the Heat, Get Out of the Hotel!

11/1/2010 By Rob Coburn

 Hotels and motels face substantial threats from bedbug infestations in terms of unhappy customers, lost revenues, damaged reputations and even lawsuits. A report from the National Pest Management Association and the University of Kentucky noted that calls to exterminators about bedbugs are up 57 percent nationwide since 2005, with 67 percent of the nearly 1,000 pest management companies surveyed saying they treated bedbug infestations in hotels or motels.

Given the nature of the travel industry, it's no wonder the pests are frequent visitors. Part of what makes bedbugs so difficult to treat is that they are the ultimate hitchhiker, traveling easily from place to place in a suitcase, bag or purse, on clothing, or more. Their presence is not necessarily related to how clean and sanitary a building may be. They live within the darkest crevices of a room, including behind headboards, within mattress creases and behind picture frames, to name just a few.

They tend to only appear at night, feeding by biting and sucking the blood of people as they sleep. Their bites, while not known to transmit diseases, cause itchy, red welts on the victim. Often the hotel has no idea an infestation has occurred until these welts appear on an innocent guest.

Treating a Bedbug Infestation
It's no secret bedbugs are a serious nuisance. Their presence has the potential to cause severe damage to a facility's reputation. So how can a hotel or motel manager contain and prevent the problem?

Unfortunately, techniques commonly used to eliminate and prevent other crawling insect pests, such as cockroaches and ants, are not effective against bedbugs. These techniques focus on the minimal application of pesticides and placement of products in areas where humans and pets cannot come into contact with the product. This method doesn't impact bedbugs because:

• They are not attracted by any baits or pheromones, and they are shaped in such a way that their abdomen may not come in contact with surfaces treated with insecticides;
• Their piercing mouthparts do not enable grooming, which is how toxins would enter the body; and
• They seek shelter in secluded, protected sites where they may not come in contact with the pesticides.

While some chemical treatments have proven to be effective, they simply are not safe for the environment or those who use the room following treatment.

So what's the solution? Heat remediation is proving to be the only scientifically sound approach to address the critical issue of bedbugs while providing a safe and chemical-free atmosphere for both travelers and facility staff. It is also a convenient, easy-to-use and quiet operation solution that allows remediation to proceed without disrupting operations.

How Heat Remediation Works
Research shows that bedbug adults and nymphs dehydrate, due to a variety of physiological changes, and die when exposed to temperatures of 111ºF to 113ºF for 15 minutes. Thus, heat remediation requires a system that raises the temperature within a room for a sustained period of time. When used properly, it is 100 percent effective in killing insects, including bedbugs, in all stages of development—egg, larvae, pupae and adult.

Electric portable heaters are the cleanest and most convenient of all types of heat treatment available today. They can reduce capital investment, as the mobile units require fewer heaters within one facility.

They also don't produce any toxic combustion byproducts, water vapor (a byproduct of fossil fuel combustion) or open flame. They also do not require fuel to be stored on site. There is no chance of a fluid leakage and they are safe to operate in unattended and enclosed areas.

To administer this solution, a pest management company circulates heated air throughout a treatment area, raising temperatures on walls, ceilings, furnishings and floors, as well as within wall cavities and other openings. Before starting a treatment, this company would take all necessary precautions to remove televisions, appliances, electronic devices, plants, artwork or any material from the target areas that may be damaged by the elevated temperatures. Additionally, power to lights and wall receptacles are turned off and sprinkler systems deactivated prior to the procedure. Prior to implementation, the local fire authorities should be consulted for proper procedures for monitoring the thermal treated area during the interim absence of a sprinkler system.

Temperatures Remotely

Monitored Ambient air, surface and wall-void temperatures are remotely monitored and recorded by trained professionals over the duration of the treatment, in order to provide real-time data on conditions within the room, without exposing technicians to high temperatures and preventing heat loss caused by technicians entering and exiting the room. Once temperatures lethal to bedbugs are maintained in all target areas for a sufficient period of time, equipment is turned off and the temperature slowly returns to normal.

Air-conditioning should not be turned on following a treatment. Instead the room should be slowly and evenly cooled to prevent damage. After surface temperatures of the heater coils have dropped below 105°F, the heater, fans and monitoring equipment can be removed.

The cost of heat treatment is around $600 per room. Unlike other treatments that can leave some bedbugs, larvae, eggs or pupae untreated, heat is 100 percent effective and is therefore a valuable and sound investment. It is also more efficient than other options, taking far less time (and visits) to treat. Heat is also recommended as a preventive measure, to treat potential problems before an infestation occurs—and destroys a reputation.

As the travel industry continues to combat this difficult and resilient pest, effective solutions are needed to help assure staff and travelers the issue has been safely handled. If your facility ever has to face bedbugs, heat is the safe, simple, environmentally friendly—and effective—solution.

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