

DON'T LET THE
BED BUGS

...BITE YOUR BUSINESS

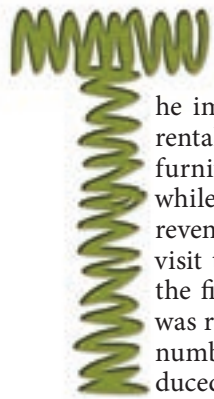


A corporate executive and his family arriving from overseas were placed in a fully furnished home rented by a relocation firm. Within days of moving into the home, the family began noticing welts on their arms and legs. They couldn't figure out what was causing the itchy welts and not being familiar with bed bugs, the thought that it could have been bed bugs never crossed their mind. The covert lifestyle of bed bugs allowed the infestation to spread for almost two months before the family finally observed the bugs feeding upon their infant one night. Immediately, the furniture rental company was accused of introducing the problem and was held responsible for the infestation. This is a story line that over the past five to six years has become more and more common. As recently as six years ago, bed bugs were unheard of; today it is a common occurrence. Bed bugs were virtually eradicated from the United States shortly after World War II with the heavy usage of pesticides such as the now-banned DDT; however, in recent years they have made a dramatic comeback and have spread to all 50 states very quickly. Some experts blame international travel on the rampant reappearance of bed bugs as travelers unknowingly bring the insects home with them in their luggage. In any case, one business that is being significantly impacted by bed bugs is the furniture rental industry.

BY RICHARD COOPER (WITH CONTRIBUTIONS BY JEFF WHITE)



Bed bugs
are back and
on the attack.
Make sure
your rental
furniture is
protected.



he impact on the furniture rental industry is twofold: either rental furniture can be the source of a bed bug infestation or furniture that was previously uninfested can become infested while at a client's location. In either case, the end result is lost revenue, reduced profits and increased liability. If we revisit the case study presented at the beginning of the article, the first thought is, how do we know the furniture company was responsible for the bed bug infestation? Clearly there are a number of different ways the bed bugs could have been introduced other than through the rental furniture. However, in this particular case, the evidence stacked up against the furniture rental company and it was held responsible for the infestation. The end result of was tens of thousands of dollars in hotel bills, pest control bills, loss of property and thousands more to have all of the family's personal belongings (including their car) fumigated with Vikane gas prior to relocating them to a another fully furnished home.

Setting up policies and procedures

With the growing liability associated with bed bugs, the burden of proof will fall on the furniture rental company to prove that it has done everything possible to prevent the rental of furniture that was infested prior to receipt by the client. The development of policies and procedures for dealing with bed bugs is essential for any company that rents furniture. These policies and procedures should document the steps taken to ensure, to the best of one's ability, that furniture is free of bugs when leaving the warehouse and that the vehicles used to deliver furniture are not infested as well. Procedures also need to be in place for dealing with furniture pick-ups at clients' locations where bed bugs may be present.

The first step to take is to educate your staff about bed bugs. There are a number of common misconceptions that, if not cleared up, can result in a false sense of security and can ultimately result in a bed bug problem that could have been prevented. For example, it is often believed that bed bugs are restricted to beds only and that throwing an infested bed away is the solution. The truth, however, is that bed bugs and their eggs can be found in any piece of furniture or personal item.

Another common misconception is that a visual inspection of furniture is an adequate method to determine if bed bugs are, or are not, present. Just because bed bugs are not observed doesn't mean they are not there. Due to the cryptic nature and small size of these bugs (bed bug eggs and the freshly hatched immature bugs are 1 millimeter in length), they often go undetected during a visual inspection. Therefore, you cannot rely on visual inspections to give an accurate summary of the presence or absence of bed bugs. However, adult-sized bed bugs are visible to the naked eye. They are reddish-brown and grow to about one-quarter

inch or five-eighths of an inch long. Small rust-colored spots on pillow cases and sheets and/or bed bug droppings can be visual cues that there may be an infestation. Bed bugs are bloodsuckers and the rust-colored spots are evidence of a crushed insect. They are not yet known to spread disease, but some people can have severe allergic reactions to the bites. So, since bed bugs come out and feed at night and hide in cracks and crevices during the day, looking for evidence of their existence can provide good clues. A good magnifying glass can help, too.

The misconception that periodic treatment of a structure or delivery vehicle with pesticides will eliminate a bed bug problem is especially dangerous. Often rental furniture companies that find a dwelling to be infested will require the home to be treated prior to picking up the furniture for return. The belief is that once the home has been treated, it will be "safe" to pick up the furniture because all of

the bugs will be dead. This is simply not the case for a number of reasons. First, some bugs are very tolerant or resistant to the chemicals used. Eggs are not affected by the pesticides and will continue to hatch in the days following the treatment and bugs that were between blood meals are unlikely to be affected by the chemicals at the time of the application.

In addition to educating staff, it will be important to create and document the steps and procedures for all employees to follow when dealing with bed bug-related issues. For example, procedures might include the following steps:

1. Ensure that furniture is free of bugs prior to being placed into a delivery vehicle;
2. Ensure that the delivery vehicle is free of bugs; and,
3. Ensure that furniture being returned into inventory is free of bugs.

Step 1: Ensure that furniture is free of bugs prior to being placed into a delivery vehicle

Heat chambers are one method currently being used by the furniture rental industry to eliminate the potential for bed bugs. Direct exposure to temperatures in excess of 115 degrees F for 15 minutes is enough to kill all stages of bed bugs, including the eggs. However, in order to heat an item correctly, it must be exposed to high temperatures for the core of the furniture to reach lethal temperatures. Typically, temperatures need to be elevated to 160 degrees F or higher and held for several hours in order to reach a lethal temperature throughout the furniture. Otherwise, the bugs can find "cool zones" to hide in until the heat treatment is completed. When done correctly, the use of heat can be a very effective method of eliminating bed bugs from furniture and is one of the few ways to ensure that furniture that is being delivered or returned into inventory is free of bugs. The greatest limitation of this method is that some items or finishes can be damaged and thus cannot be subjected to heat treatments.

Some furniture rental companies that can afford to outfit a heat chamber using a truck box or trailer, for example, are doing so to combat infestation. Finding companies to outsource thermal treatments, however, are few and far between.

Gas fumigation—not be confused with fogging/bombing or total release aerosols—is another very effective method that will destroy all life stages, including the eggs. The advantage of this method over heat

is that items that cannot be subjected to extreme temperatures can be fumigated. The disadvantage is that fumigations cannot be conducted by "in-house" staff unless a member of the staff possesses a license to conduct fumigations. The gas used for fumigations is a lethal gas (typically Vikane) and so only those who have undergone extensive training and possess a license to conduct fumigations can conduct them. Rental dealers may take it upon themselves to either hire out fumigations to a local pest control company or offer training to an in-house staff person for fumigation licensing.

Step 2: Ensure that the delivery vehicle is free of bugs

Using different vehicles to deliver furniture from those being used to pick up furniture may help reduce the likelihood that delivery vehicles will become infested. However, because this may not be economically feasible, other measures may need to be considered. For example:

- ▶ Routine inspection and monitoring and treatment of delivery vehicles;
- ▶ Wrapping of all furniture in plastic prior to being placed into the vehicle;
- ▶ Returning inventory that is coming from a dwelling with bed bugs is never placed in a vehicle that contains outgoing inventory;
- ▶ Gas fumigation of any vehicle and its contents in the event bed bugs are identified or infested furniture is brought back in the vehicle.

Mattress and box spring encasements are another very effective tool that can be used by rental furniture companies. Encasement of mattresses and box springs can be used as a precautionary step before renting out any bedding. The encasements will greatly aid in identifying bed bug infestations at the time of furniture return and should never be removed by a customer during the rental period. Fully encased beds restrict the ability of bed bugs to infest the interior of the mattress and box spring where they will go undetected; instead, any bed bugs will be readily visible on the exterior of the encasement. In addition, if any beds are found to be infested during a pickup, they can be encased prior to being placed in the delivery vehicle, thus preventing the dispersal of bugs from the infested mattress and box spring. It is important, however, to be sure that the encasements used have been designed specifically for bed bugs and have been proven to be effective. One such encasement has been designed by Protect-A-Bed out of Chicago, Illinois. Not only are these encasements fully bed bug proof, but they also provide anti-allergen protection as well and can be a value-added service.

Step 3: Ensure that furniture returned into inventory is free of bugs

Changes in contract language to address the client's financial responsibility for items that become infested while in their possession may become more common. In order for this to be possible,



With the growing liability associated with bed bugs, the burden of proof will fall on the furniture rental company to prove that it has done everything possible to prevent the rental of furniture that was infested prior to receipt by the client.

it will be necessary to be able to establish that a customer received furniture that was "bug free" (see the previous two steps).

Regardless of whether or not such contract language exists, crews that pick up furniture must be trained in spotting visual evidence of bed bugs so that infestations that are visibly present are identified prior to removing the furniture from the dwelling. Any furniture that is removed should be handled carefully as it is removed—wrapping it tightly in plastic is a good idea—to prevent the inadvertent dispersal of bugs and eggs that may fall off the furniture. Mattresses and box springs can be encased, as mentioned above, to trap any bugs that may be associated with bedding. Again, infested furniture should not be placed in a vehicle containing items that have yet to be delivered.

Treatment of returning inventory with common pesticides is not an effective method for ensuring the elimination of the bugs and their eggs. Instead, upon return, all items should either

be discarded, heat-treated or fumigated. Fumigation of the delivery vehicle will also ensure elimination of bugs that may be associated with it. Limiting eradication efforts only to items that are visibly infested can be a costly mistake as any item coming from an infested dwelling is subject to bed bugs.

Clearly there are several different pro-active steps that can be considered and while there is no sure-fire way to be

100 percent certain that no bugs are present, procedures that are sound and well documented will provide the grounds for a strong defense in the event of litigation. Dealing with bed bugs correctly will surely result in added expenses and will change the terrain from a competitive point of view. Ultimately, one must weigh the costs and determine the level of risk that they are willing to take when it comes to this challenging new pest problem. ■

Richard Cooper is the staff entomologist and technical director for Cooper Pest Solutions in Lawrenceville, New Jersey, 800/949-2667.

Jeff White is a research entomologist at Cooper Pest Solutions. You can e-mail Cooper at rick.cooper@cooperpest.com and White at jeff.white@cooperpest.com. Cooper will be giving a presentation, "Don't Let the Bed Bugs Bite!" at APRO's 2007 Rent-to-Own Convention & Buying Show in Reno, Nevada.