

How to Select a Bed Bug Control Provider

Mike Merchant and Wizzie Brown*

since the early 2000s, bed bugs have become increasingly common in homes, apartments, hotels, and other places of business. Increased immigration and international travel, coupled with the loss of effective insecticides, have helped this insect spread faster than any other urban insect pest recently.

Bed bugs, *Cimex lectularius*, are ½2 to ¾6 of an inch long and feed on the blood of humans and some domestic animals. They are active mostly at night as they feed on people who are sleeping. Though most people have no reaction to their bites, some get red, itchy welts. Bed bugs do not transfer diseases to humans, but their bites can be irritating and they are disturbing to most people.

Bed bugs can be difficult to eliminate; home remedies and consumer pesticides such as aerosol bug bombs are largely ineffective against them. Professionals use a variety of methods because they know that pesticides alone will not control bed bugs.

If you want to eradicate bed bugs from your home quickly, it's best to hire a pest control company that has proven success against these pests. An experienced professional can guide you through the process and ensure you feel comfortable living in your home after a bed bug infestation.



Bed bugs are one of the most difficult to control household pests. Finding a competent professional is critical in eliminating bed bugs from your home.

What to look for in a pest control company

The most important qualities for a bed bug control provider are experience and a record of controlling these pests in situations similar to yours. Apartment managers and tenants should look for someone with experience treating multifamily housing. Hotel managers should select a provider with experience controlling bed bugs in the hospitality industry.



A pest management professional checks his infrared thermometer, used to check rooms for cold spots during heat treatments for bed bugs.

^{*}Professor and Extension Urban Entomologist, Extension Program Specialist–IPM, The Texas A&M University System

Ask the pest control representative how many bed bug jobs they completed in the past year. Request a list of recent clients and ask them about the quality of the company's work, promptness in responding to additional service needs, and overall success in controlling bed bugs.

Beware of companies that offer residential or apartment quotes without inspecting the property. The cost to treat for bed bugs varies according to the level of infestation and the clutter and furnishings to be moved and treated. An inspection of the property before giving a quote shows the company is committed to providing appropriate treatment at a fair cost.

Ask who will be treating your home or business, how they will be supervised, and if they are specifically trained for bed bug control. Find out how long the service will take and if more than one technician will be involved. Initial treatments can take four or more hours, especially when beds and heavy furniture must be moved. A team of two or more can treat more thoroughly; one of the technicians should be highly experienced.



Experienced professionals use a variety of control techniques. This bed bug control technician is using steam to kill bed bugs and their eggs on the back of a dresser.



This bedroom has been treated with an integrated approach to bed bug control that includes fitted mattress encasements and barrier cups under the bedposts. Some companies require residents to bag personal items and move furniture before treatment, others prefer to do it themselves to avoid spreading bed bugs. Find out who will be responsible for bagging clothing, drapes, bedding and other personal items.

Integrated pest management (IPM) is the most effective way to control pests. An IPM-based bed bug control program will identify pests accurately, use multiple control tactics, monitor progress and plan for follow up. A company that uses insecticides, steam, or heat alone is not using integrated pest management. To determine whether a company really uses IPM, ask what control methods they use, how they will monitor whether bed bugs are still active, and what kinds of follow-up can you expect after the first treatment.

A professional approach to bed bug control includes:

- A clean, professional appearance
- Showing up on time
- Clear instructions about how to prepare for treatment
- Answering questions willingly, politely and clearly
- Responding promptly to service requests

Some pest control companies provide extra services when preparing your property for bed bug treatment. They may provide bed and box spring encasements and dissolvable laundry bags. They may also help or actually prepare rooms for treatment, and disinfest personal items that cannot be treated in place. Some companies charge for these

services, so find out exactly what each company provides when comparing costs. For the elderly or handicapped, or for managers with uncooperative tenants, these extra services can be the key to a successful treatment.

Good communication is a sign of professionalism. The company should provide clear instructions on how to prepare for bed bug treatment. Specific items include:

- What needs to be done prior to service
- Which rooms will be treated
- How long will the service take
- If and how you should remove personal items before the service
- How bagged items should be handled after treatment

This information is often in a detailed service description and preparation sheet. It should describe exactly what the company expects you to do before rooms are treated.

Approaches to bed bug control

Strategies for controlling bed bugs vary. Because equipment is expensive and large-scale heat treatments require specialized training, bed bug control companies tend to be **heat treatment** providers or **integrated control** providers. Effective tactics for both approaches include the following:

- Heat treatments for whole rooms or whole buildings
- Heat boxes for furniture and personal items
- Steam
- Solar heating for bagged items
- Spot freezing
- Insecticide control with sprays and aerosols
- Insecticide control with dusts
- Fumigation with Vikane® gas
- Small area fumigation with resin strips
- ◆ Bag or box fumigation with CO₂
- Vacuuming
- Mattress and box spring encasements
- Bed post barriers or interceptors
- Discarding infested items

- Quarantining of infested items
- Washing and dry cleaning

Heat treatment is not available everywhere, and is usually more expensive than other options. Large structures can be difficult to heat, and if an entire building cannot be treated at once, bed bugs can escape lethal temperatures by moving from hot areas to cooler ones. In these cases, using insecticides as well heat is a good option.

Heat treatment can give good control, but requires experience and sufficient heaters to maximize its effectiveness. In rooms that are cluttered or cannot be easily emptied, heat treatment may be the best choice.

Integrated bed bug control does not rely on only one treatment method. Integrated bed bug control programs use a combination of insecticide sprays and dusts, non-chemical measures like vacuuming and steam, and other methods—especially for bagged items. The integrated control approach can be very effective in the hands of experienced technicians. Unlike with heat, integrated control requires the technician to know exactly how bed bugs are distributed in the home. It also requires that personal items be carefully bagged and removed for treatment or storage.

Preparation

Currently there are two approaches to preparing for treatment. Many companies take the customer-based approach, which has the client bag all clothing, drapes, books, electronic equipment, toys, etc., before treatment. You may also have to move furniture away from the walls so the technician can easily inspect and treat. With this approach, the individual is primarily responsible for treating bagged items. Done correctly, this approach makes treatment quicker, and less expensive. However, failure to prepare properly can delay service and allow the infestation to worsen.

Companies that use the minimal preparation approach are concerned that cleaning before treatment may spread bed bugs to other areas. For example, you could spread bed bugs by moving an infested DVD case from under a bed to a bookshelf in the living room. Companies address this con-

cern by having their technicians bag and label all personal items, and set them aside to be treated.

Rather than spread bed bugs around the home, potentially infested goods remain in the room for later treatment. This approach is more expensive, but may pay for itself by keeping the infestation localized and reducing need for follow-ups.

Ask the provider which approach they use and what level of preparation they require. Find out if they will help residents who can't prepare on their own. Ask also what help they offer for treating bagged items.

When whole rooms or buildings are to be heat treated, you may need to make special preparations to protect items that can be damaged during heating. A certified technician may need to shut off or remove heat-sensitive sprinkler heads in buildings with sprinkler systems. Ask your provider how this will be handled, and if there are extra costs associated with preparation.

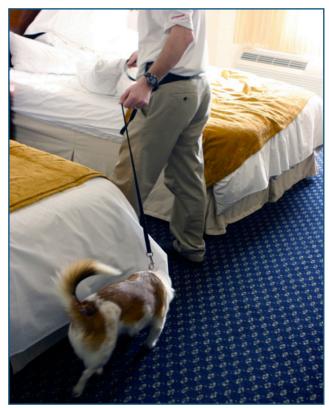
Warranties and follow-up

The job is not over once your home or property is treated for bed bugs. One visit rarely eliminates all the bed bugs, so the provider should provide a warranty and monitor bed bugs for one or two follow-up visits.

Ask the bed bug control provider how long the company provides follow-up without extra charge. Typical warranties range from 30 to 90 days. Some companies do not start the warranty period until the last bed bug sighting; others start the warranty at the initial treatment. Understand the warranty you are being offered before choosing a provider.

There are different ways to monitor for bed bugs. Some companies rely on visual inspections and traps or interceptor cups. At minimum, the inspector should inspect the bed area with a flashlight. Some companies use dogs to detect bed bugs before or after treatment. Combining visual inspection with traps or dogs is helpful because low levels of bed bugs are difficult to detect by sight alone.

If bed bugs are still present after treatment, follow-up sprays or temperature treatments should be used. Some insecticides do not kill bed bugs in the egg stage, so some areas may need retreatment



Canine inspections are available through some companies and provide another way to check the success of a bed bug treatment program.

after the original service. A whole-structure heat treatment should kill all life stages of bed bugs; however, partial heat treatments have the same risk of reinfestation as conventional spray treatments.

How much will it cost?

The price of bed bug control varies according to the level of infestation and the size and complexity of the structure. Treating a single bedroom apartment starts at about \$300. It costs more to treat homes that are cluttered or if the problem has spread beyond the bedroom. Heat treatments are generally more expensive than integrated treatments. Expect to pay more if the service includes a canine inspection.

For more information

For more information about bed bug control, see: http://citybugs.tamu.edu/factsheets/biting-stinging/bed-bugs/

Interview Card

A phone interview will help you screen companies to find the best candidates. Give each company 1 to 5 on their answers to each question. Before selecting a provider, add the scores and compare the totals to each quote. The lowest quote is not necessarily the best choice for bed bug control.

Question	Company A	Company B	Company C
Experience: How many bed bug control jobs in properties similar to mine does your company perform in a year?			
Preinspection: How soon will someone be able to inspect my home? What's the average wait between the initial inspection and actual treatment?			
Technician training: What kind of training and experience will my technicians have?			
Technician support: How many technicians do you send on treatment day?			
Preparation: What kind of preparation does your company require of me before service?			
Material assistance: What does your company supply to help me with preparation and treatment?			
Communication: Will your representative provide me with written instructions for preparation and follow-up?			
Monitoring: How will your company monitor for bed bugs after treatment?			
Follow-up: How many follow-up visits do your technicians typically conduct, and when are they scheduled?			
Warranty: What kind of warranty does your company provide, and how long does it last? Does the warranty period start after the first treatment, or after the last time I see a bed bug?			
Integrated control: What kind of treatments do you use?			
Professionalism: Was the inspector knowledgeable, polite, professionally dressed, and willing to answer questions?			
Total Score			
Cost			

Bagging tips

If you must bag clothing, drapes, books, papers, drawer contents, electronics, DVDs, etc., clear garbage bags are best. You can see what is in them, and in the sun the items inside will heat up more and faster than they will in opaque bags—even black ones.

The type of bag you use is less important if you are just using it to transfer washable items to a washer or dryer. However, use double bags so that the potentially contaminated inner bag can be immediately discarded, and the outer bag used to transport the clean clothes after washing.

Some pest control companies recommend dissolvable laundry bags. These bags are more expensive, but they eliminate the risk of spreading



bed bugs because the bag and its contents are placed directly in the washer. Pest control providers or property owners sometimes supply dissolvable laundry bags or other sealable plastic bags for the treatment process.

How to treat bagged items

Clothing, bedding and other washable items should either be:

- Washed in hot water for at least 20 minutes
- Dried in dryer on hottest setting for at least 30 minutes
- Dry cleaned

During the summer, clothing and other items such as books, electronics, and toys can be disinfested using solar heat. In direct sun, at 90 to 95 degrees F, bagged items should reach 115 to 20 degrees F. One or more hours at these temperatures is lethal for bed bugs and their eggs.

- Use clear plastic bags
- Place the bags in direct sun, preferably on a concrete surface
- Set bags out for a full day

Ask your pest control professional about fumigation strips to kill bed bugs in nonwashable belongings. These strips contain an insecticide called dichlorvos, and will kill bed bugs in 24 to 48 hours. Follow the label directions carefully and dispose of used strips as directed.

Regardless of temperature, bed bugs will die if left in a bag. With no access to blood, most bed bugs starve within two months if stored at 70 degrees F or higher. At around 50 degrees F, bed bugs will die after about 5 months.

Special Considerations for Apartment Managers

Bed bugs pose special challenges for apartment managers. Because treating for them is expensive and requires special techniques, bed bug control services are usually in addition to standard pest control contracts. It costs more to treat for bed bugs than for cockroaches or ants, and the threshold for acceptable bed bug control is usually lower. Also, it can be difficult to get tenants to promptly report bed bug problems because of fear of eviction or stigmas associated with these pests.

Who should pay for bed bug treatment?

When a manager discovers bed bugs in an apartment, the first instinct is to find out how they got there, and whether a tenant is at fault. While some tenants may knowingly move from an infested to an uninfested apartment, it's difficult to prove they did it or that they are, in fact, the source of an infestation. Bed bugs move easily through apartment complexes—they can spread from units above, below, or next door. When bed bugs are discovered, adjoining apartments must also be inspected.

Some managers require tenants to pay for part or all of bed bug treatments. You should, however, consider unintended consequences before instituting such a policy. Many tenants cannot afford bed bug treatments and will frequently postpone reporting the problem, try to treat the problem themselves, or wait until the infestation becomes unbearable and move out. This leaves you and surrounding residents with an expensive and difficult-to-treat problem. The longer bed bugs infest an apartment, the more difficult and time-consuming they are to control. In addition, the longer bed bugs are in an apartment,

the greater the chance that they will spread to adjacent units.

What should I ask prospective pest control providers?

When selecting a bed bug control provider, look for a company with a history of eliminating bed bugs from other apartment communities. Ask for references and about their approach to tenant preparation. If they require more than minimal tenant preparation, ask yourself if the tenants will be willing or able to meet the requirements. Elderly, disabled residents, or residents with clutter issues, may need help. If a significant number of tenants are not willing or able to prepare properly, heat treatment may be a better option because it requires less preparation.

Ask if the company has a bed bug monitoring program that can catch bed bug problems early. Monitoring is more effective than relying solely on tenant complaints. And detecting problems early can save you money by addressing pest issues before they get out of hand.

If a tenant has a bad infestation, isn't it their fault for not reporting the problem promptly?

Not necessarily. Initially, most people show little or no reaction to bed bug bites. Bed bugs are small and feed at night, so they can go undetected for months. You can encourage tenants to report bedbugs promptly by teaching them how to recognize bed bug problems. Tenants are more likely to report bed bugs if they know they will not be penalized or charged for bed bug treatment.

The information given herein is for educational purposes only. Reference to commercial products or trade names is made with the understanding that no discrimination is intended and no endorsement by the Texas A&M AgriLife Extension Service is implied.

Texas A&M AgriLife Extension Service

AgriLifeExtension.tamu.edu

More Extension publications can be found at AgriLifeBookstore.org

Educational programs of the Texas A&M AgriLife Extension Service are open to all people without regard to race, color, sex, religion, national origin, age, disability, genetic information, or veteran status.

The Texas A&M University System, U.S. Department of Agriculture, and the County Commissioners Courts of Texas Cooperating.