

are dry before being placed in a clothes dryer at a moderate temperature setting. Dry cleaning procedures also kill bed bugs, but there is a risk of infecting the establishment when buggy items are tagged and sorted. Placing items in disposable plastic trash bags helps to minimize the risk of bugs falling off in the dwelling during transfer to the washer and/or dryer.

Items which cannot be put in a washer or dryer can sometimes be de-infested by wrapping in plastic and placing them outdoors for at least a day in a hot, sunny location — such as on pavement, or inside a closed vehicle parked in the sun. Packing items loosely in black trash bags and elevating objects off the ground helps the heat permeate better, making it harder for bugs to find a cool spot to hide. Monitoring with a thermometer is prudent to ensure that a temperature of at least 120°F is achieved whenever bugs may be present. Bed bugs also will succumb to cold temperatures below 32°F, but the freezing temperatures must be maintained for a much longer period, e.g., one to two weeks. Consequently, heating tends to be a better option. Efforts to rid dwellings of bed bugs by raising or lowering the thermostat will be unsuccessful, although professionals are able to achieve lethal temperatures with supplemental heaters (see subsequent section entitled “Heat Treatments” for details).

Discarding/Encasement — Most furnishings need not be discarded, although at times this may be advisable. In cases where beds and upholstered items are heavily infested, the pests often reside in hard-to-reach places. If there are holes or tears in the fabric, bugs and eggs may be inside, as well as on the outer surface. When infested items are discarded, bagging or wrapping them in plastic prevents dislodgement of bed bugs en route to the curb or dumpster. Marking or defacing infested items discourages pickup by others and helps limit their spread.

In the case of beds, a more economical option is often to encase both the mattress and box spring in protective covers like those used for

allergy relief. Encasements specifically designed to help protect against bed bugs are available through retailers or pest control firms. Higher quality encasements tend to be more durable and comfortable to sleep on. Once the covers are installed and zipped shut, any bed bugs that happen to be inside eventually die. Encasements also help protect newly purchased beds, and make it easier to spot and destroy any bugs residing on the outer surface during subsequent examination. Encasements will not, however, keep bed bugs from crawling onto a bed and biting a sleeping person. Bed bug-proof encasements are also available for sofas and loveseats and can be supplied by pest managers.

Mattress liners impregnated with insecticide also are available to help in the prevention of infestations.

Vacuuming, Steaming, Freezing. As mentioned earlier, household vacuuming of floors and surfaces seldom reaches the areas where bed bugs typically hide. Targeted vacuuming of infested locations, however, can help remove some of the pests before additional treatment is undertaken. Bed bugs and especially eggs can be difficult to dislodge. Optimum results will be achieved by slowly scraping the end of the suction wand along infested seams, folds and edges of beds and upholstered furniture, perimeter edges of flooring, and wherever bugs are observed. Bed bugs can survive being sucked up by a vacuum, so it's important to dispose of the contents in a sealed trash bag. To make disposal easier, a knee-high nylon stocking can be inserted (toe first), into the end of the suction wand, securing the other end of the stocking around the wand opening with a rubber band.



Encasements are an economical alternative to discarding infested beds.

When the vacuum is turned on and bugs are sucked into the tube, they will be trapped in the stocking which can be secured and discarded.

Some pest control firms also employ commercial steamers or spot-freezing equipment to treat areas where bed bugs are found or suspected. Used correctly, they kill bugs and eggs on contact. Neither method, however, affords residual protection against bed bugs which may have been missed. Steaming and spot-freezing equipment also have limited ability to penetrate fabric, wood, and other materials where bed bugs often reside. Consequently, the methods are seldom used alone, but in conjunction with other measures.

Insecticides. While the former measures are helpful, insecticides are also used by most professionals. A variety of products are available formulated as liquids, aerosols and dusts. Baits such as those used to control ants and cockroaches are ineffective since these bugs must bite and feed on blood. Bed bugs are becoming increasingly resistant to pesticides, similar to the way some germs are becoming antibiotic-resistant. Professionals know which products tend to be most effective. Application entails treating all areas where the bugs are found or likely to reside. This takes a good bit of effort, and follow-ups are usually needed. Companies often treat seams, folds and crevices of beds, chairs and sofas, but usually will not spray the sleep surface or seating area. They also do not spray bed sheets, blankets or clothing, which instead should be hot washed or heated in a dryer. Bleach, alcohol, cigarette lighters, and ‘bug bombs’ should NOT be used to control bed bugs. These actions are ineffective and can result in fires and other dangerous outcomes.

Fumigation using a penetrating gas is another way to de-bug dwellings or furnishings, but the procedure is only offered by certain companies. True fumigation is not the same as setting off a fogger or bug bomb. The fumigation process is technically complex and requires

vacating the building for a period of days. The building is then sealed and injected with a lethal gas, usually sulfuryl fluoride. Because the entire building must be vacated, the procedure is logistically more challenging with multi-unit buildings such as apartments, than for single-family homes. Bed bug fumigations tend to be more common in southern and western states, where the approach is also used to control certain wood-dwelling (drywood) termites.

Heat Treatments. Some pest control firms use specialized heating equipment to de-infest furnishings, rooms, and entire dwellings of bed bugs. The procedure involves heating the infested item or area to temperatures lethal to the bugs. Portable heaters and fans are used to gradually heat the air to about 120-130°F while monitoring with strategically placed sensors. By carefully controlling the temperature, bugs and eggs are killed wherever they may be without damaging household items.



Professionals use a variety of methods to control bed bugs, including insecticides.