

# HOME GROUNDS FACT SHEET



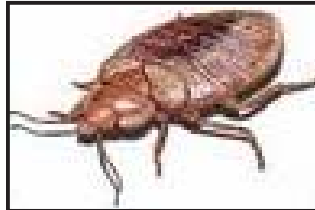
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## Bed Bugs

The wingless bed bug, *Cimex lectularius*, is a bloodsucking parasite of humans. Although humans are the preferred host, bed bugs will also feed readily on poultry, mice, rats, some song birds and other animals. It belongs to the insect order Hemiptera and is a true "bug." It is well-adapted to humans and the actual bite is nearly painless.



Bed bugs have a sharp beak used to pierce the skin of the host and then begin feeding, injecting a fluid which helps in obtaining its meal. This fluid may cause the skin to become swollen and itchy. Some people are very sensitive to these bites while others are hardly aware of them. They are not known to act as a vector in the transmission of other disease agents.

Bed bugs were once a major pest in the United States. Insecticidal control was very effective in reducing numbers and until fairly recently, bed bugs became a minor problem. However, there has been an increase in the use of baits to control cockroaches and ants (these baits are not effective against bed bugs). This factor, combined with the increasing numbers of visitors to and from other countries, has resulted in more frequent reports of infestations at many hotels. These infestations then spread to homes and other buildings (on clothes, luggage, furniture and other items).

### Description

A mature bed bug is 1/4-3/8 inch long and reddish-brown in color. The body is oval, wingless, flattened and well-adapted to hiding in cracks and crevices. The body may become greatly enlarged after a blood meal and initially

turns blood-red and then fades to dirty brown. Females can live nearly a year without food and can endure freezing temperatures for considerable time. Females lay 1-5 white eggs per day over a period of 2-10 months with a usual total of about 200 eggs per

female. Young bed bugs (nymphs) resemble the adults but are smaller and almost colorless at first. The nymphs undergo five molts, each resembling the adult and each requiring a blood meal. The nymphal period can last for several weeks under favorable conditions to as long as a year.

### Habits

Bed bugs are found on the bed clothes and possessions of infested individuals. They commonly occur in mattress seams, inside mattress coils, cracks in bed frames, in furniture, wallboards, wood paneling, door and window frames, behind pictures, under loose wallpaper and in rooms near sleeping areas. They may also be found in camping and sleeping equipment, outdoor animal sheds and coops. Immediately after feeding, they defecate a semi-solid, sticky remains of the last meal, a good clue to their presence.

### Integrated Pest Management (IPM) Considerations

IPM is a common sense approach to pest control and plant care. It employs a number of measures to prevent, control or reduce problems. Always use the least toxic methods

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first. A good mechanical control, in many instances, is to vacuum the insects and then throw away the bag. Regarding household pests, in addition to regular house cleaning, the best preventative method is to monitor the home, i.e. note any cracks in foundations, air spaces between windows and frames, poor fitting doors, moisture from leaks, etc. and correct such examples/situations.

## Detection and Control

Detection consists of finding the places where the bedbugs hide during the daytime. Hiding places can often be discovered by keeping an eye out for black or brown spots of dried insect excrement on surfaces where the bugs rest. Eggs, eggshells or cast skins may also be found. Early in an infestation, bed bugs are likely to be found only around the seams, tufts or folds of mattresses or bed covers. Later they may spread to crevices in the bedding or in all of the places mentioned previously- baseboards, windows, furniture or other similar hiding places.

Initial management should concentrate on vacuuming and thoroughly cleaning any and all areas where evidence of bed bugs is seen. Pay special attention to the mattress- especially any seams or tucks that may be hiding places. This process may have to be done several times as eggs may be missed or the bugs may be very well

hidden during the cleaning process. The vacuum bag should be removed, sealed and discarded immediately.

Caulk and otherwise repair any cracks and spaces behind baseboards and other areas of the house. Keep woodpiles, shrubs and weeds away from the foundation of the dwelling. Eliminate garbage. Store mattresses in protected areas, unfolded to prevent rodent nesting. Exclude alternate hosts such as rodents and birds.

In some cases, cleaning may not be sufficient to eliminate the problem. Household insecticides are available to the homeowner. **READ THE LABEL AND FOLLOW DIRECTIONS.** Be sure that the chemical is labeled for use on bed bugs. Pay careful attention to areas that can be treated as per label instructions. **Do not** treat mattresses unless the label specifically states that this is allowed. All other areas that have evidence of bed bugs should be treated. Contact your local Cornell Cooperative Extension office for specific pesticide recommendations.

If the infestation is severe or if the above treatments (mechanical and/or chemical pesticides) do not provide control, the services of a pest control professional (Certified Pesticide Applicator) may be needed.



**Reference: University of Florida 2002. Public Health Pesticide Applicator Training Manual**