

## BED BUGS

Bed bugs are small wingless insects that feed solely upon the blood of warm-blooded animals. Bed bugs and their relatives have evolved as nest parasites. Certain kinds inhabit bird nests and bat roosts and await the return of their hosts; others have adapted well to living in the 'nests' (homes) of people.

Hatchling bed bugs are about the size of a poppy seed, and adults are about 1/4 of an inch in length. From above they are oval in shape, but are flattened from top to bottom.



Their color ranges from nearly white (just after molting) or a light tan to a deep brown or burnt orange. The host's blood may appear as a dark red or black mass within the bug's body. Because they never develop wings, bed bugs cannot fly. When disturbed, bed bugs actively seek shelter in dark cracks and crevices. Cast skins of bed bugs are sometimes discovered. Although such a finding confirms that bed bugs had been present previously, it does not confirm that any continue to infest the residence. Thus, inspect carefully for live crawling bed bugs. Because many other kinds of small brown bugs may be discovered, it is critical to ensure that the bugs are correctly identified (more about this below).

### DOES IT CAUSE ANY HARM?

Bed bugs seek out people and animals, generally at night while these hosts are asleep, and painlessly sip a few drops of blood. While feeding, they inject a tiny amount of their saliva into the skin. Repeated exposures to bed bug bites during a period of several weeks or more causes people to become sensitized to the saliva of these bugs; additional bites may then result in mild to intense allergic responses. The skin lesion produced by the bite of a bed bug resembles those caused by many other kinds of blood feeding insects, such as mosquitoes and fleas. The offending insect, therefore, can rarely be identified by the appearance of the bites. A physician should be consulted to rule out other causes for the lesions and to offer treatment, as needed. The affected person should resist the urge to scratch the bites, as this may intensify the irritation and itching, and may lead to secondary infection.

Physicians often treat patients with antihistamines and corticosteroids to reduce allergic reactions and inflammation. Despite what you may have heard or read elsewhere, bed bugs are not known to transmit any infectious agents.

### **Bed bugs occurrence**

Bed bugs and their relatives occur nearly worldwide. Bed bugs became relatively scarce during the latter part of the 20<sup>th</sup> century, but their populations have resurged in recent years, particularly throughout parts of North America, Europe, and Australia. They are most abundant in rooms where people sleep, and they generally hide nearest the bed or other furniture used for sleeping. Bed bugs are most active in the middle of the night, but when hungry, they will venture out during the day to seek a host. Their flattened bodies allow them to conceal themselves in cracks and crevices around the room and within furniture. Favored hiding sites include the bed frame, mattress and box spring. Clutter around the room offers additional sites for these bugs to hide, and increases the difficulty in eliminating bed bugs once they have become established.

### **Bed bugs invasion**

Because bed bugs readily hide in small crevices, they may accompany (as stowaways) luggage, furniture, clothing, pillows, boxes, and other such objects when these are moved between apartments, homes and hotels. Used furniture, particularly bed frames and mattresses, are of greatest risk of harboring bed bugs and their eggs. Thus, one should carefully scrutinize and consider the history of any used furniture, particularly 'street' items so plentiful at the beginning and end of each academic year. Because they readily survive for many months without feeding, bed bugs may already be present in apparently 'vacant' and 'clean' apartments. Bed bugs can wander between adjoining apartments through voids in walls and holes through which wires and pipes pass. In a few cases, bats and/or birds may introduce and maintain bed bugs and their close relatives (bat bugs and bird bugs). Pest control personnel should be mindful of the presence of blood feeding insects and mites that may be left behind after removing nests or roosts of birds and bats in and on the home.

### **How can you tell if the residence is infested?**

Bed bugs infest only a small proportion of residences, but they should be suspected if residents complain of bites that occurred while sleeping. The bedroom and other sleeping areas should be carefully examined for bed bugs and signs of bed bug activity. Folds and creases in the bed linens, and seams and tufts of mattresses and box springs, in particular, may harbor bed bugs or their eggs. They may also be found within pleats of curtains, beneath loose areas of wallpaper near the bed, in corners of desks and dressers, within spaces of wicker furniture, behind cove molding, and in laundry or other items on the floor or around the room. Sometimes, characteristic dark brown or reddish fecal spots of bed bugs are apparent on the bed linens, mattress or walls near the bed. A peculiar coriander-like odor may be

detected in some heavily infested residences. Adhesive-based traps used for sampling insects or rodents are not particularly effective for trapping bed bugs.