

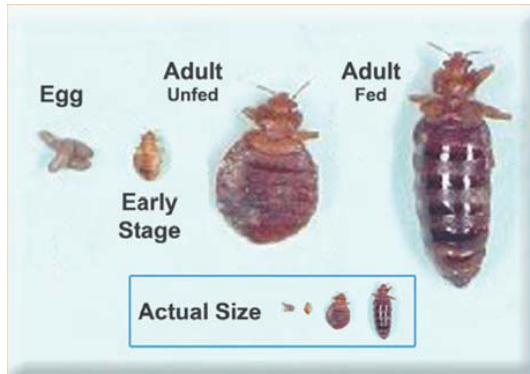
Bed Bug Fact Sheet



Environmental, Health, and Safety Office Facilities Planning and Management

What are Bed Bugs?

Bed bugs are small reddish-brown insects. They're about 3/16 inch long (size of an apple seed) and easily visible to the naked eye. They are wingless, but are fast crawlers. Their bodies are very flat with slender legs and antennae. Nymphs (immature bed bugs) resemble the adults--but are smaller and often lighter in color. Bed bugs feed on the blood of humans during the night or in darkness and crawl away to hide in nearby cracks, crevices, recesses of furniture (especially mattresses and head boards), clutter, electronic equipment, and walls of the home during the day.



Associated with people for thousands of years, they were drastically reduced after World War II by the use of pesticides that are no longer available for use, or to which they developed resistance. An individual bed bug feeds for only 3-10 minutes after biting and normally feeds only every few days.

What About The Bites?

Both male and female bed bugs bite and ingest blood. The blood meals are necessary for the female to reproduce and the juveniles to develop. The bites themselves are normally painless, and the host typically is not disturbed while bed bugs feed. While responses differ, within a day of the bite(s), most people then experience itching, pain, and/or swelling of the skin where the bed bug bite occurred. This is most common on the arms, face, hands, back or other exposed areas. Bed bugs are drawn to body warmth and carbon dioxide from our respiration. You will usually see 3 or 4 bites in a line or grouped together.



Typical Bed Bug Bites

However, the bites themselves can easily be confused with bites from other insects or arachnids (mosquitoes, fleas, ticks, or spiders). It often takes finding the bed bugs, their eggs, or droppings, in the residence to positively confirm a bed bug infestation.

Are They a Health Risk?

There is no evidence that bed bugs are involved in the transmission of any disease-causing agent, including Hepatitis B virus or HIV, the virus that causes AIDS. Bed bugs do not transmit disease organisms after feeding on multiple hosts. Regardless, bed bugs severely reduce the quality of life by causing discomfort, sleeplessness, embarrassment, and, in some people--extreme anxiety. While bed bugs, not long ago, were considered just another "fact of life" their long absence has given many of us a feeling of "entitlement" for a life free of such pests.



Treatment of bed bug bites consists of managing the itching and inflammation associated with the bites. Drugs called antihistamines and/or corticosteroids may be prescribed by your health care practitioner to reduce allergic reactions. Antimicrobial ointments may prevent secondary infection from the bites.

The medical treatment of bites, however, does nothing to eliminate the bed bug presence, and bites will recur as long as the bed bug infestation remains.

How Are Bed Bugs Identified?

By the presence of actual bugs, their light-brown skins (shed during metamorphosis into adulthood), dark spots of excrement and blood spots or stains on bedding, upholstered furniture, or walls.



Normally, a flashlight and crevice tool (putty knife, screw driver, credit card, etc.) are used to carefully and systematically check the following areas or items:

- ◇ Along mattress seams
- ◇ Under the gauze covering of box springs
- ◇ Behind wall mounted objects and bed headboards
- ◇ Behind wall switches and receptacle covers
- ◇ Inside cracks and crevices or screw holes of Upholstered, wooden, or synthetic furniture
- ◇ Under loose wallpaper or wall coverings

- ◇ Behind base and window trim
- ◇ Under the edge of wall to wall carpeting
- ◇ In electronic devices (computers, TVs, etc.)



Bed bugs infesting a couch

Bed bugs seek narrow harborage places for which their flat body shapes are designed. They normally reside close to their "hosts", but can hide over 20 feet away and crawl that distance to feed if necessary--particularly in severe infestations. A "stale sweet" odor may be detected in severe or long-lasting infestations.



Under a recessed nightstand screw

How Are Bed Bugs Spread?

Bed bugs are often spread through the acquisition of infested second-hand furniture, or by their hitchhiking on items used during travel such as suitcases, outerwear, and other belongings. Once established in a building, the bugs can then move throughout the structure by crawling along pipe and wiring runs, conduits, HVAC system ductwork, sharing of belongings, laundry, etc.

Bed bugs do not occur only in poor and insanitary conditions, and they can be found in even very clean environments. Excessive clutter and harborage in a room or structure, however, can make their spread and multiplication faster and more intense.

How are Bed Bugs prevented?

Vigilance during travel by inspecting premises to be occupied, keeping luggage and personal belongings closed and off the floor, beds, or surfaces easily accessed and infested by bed bugs. Prompt reporting of the suspected presence of bed bugs in accommodations is necessary so that their presence can be confirmed and prompt action taken to prevent their spread.

Discarded beds, couches, furniture, and furnishings should not be retrieved without a thorough inspection for infestation. Bed bugs are small, quick, and agile and can conceal themselves effectively after crawling into suitcases, boxes, and belongings.

What can be done to get rid of them?

Bed Bugs can be difficult to eliminate because they can go months without feeding, multiply rapidly, are resistant to many pesticides, and effective pesticides can often not be used on bedding or other furniture. Bed bugs do not have nests, but they do tend to congregate in habitual hiding places. The help of trained pest control personnel and mutual cooperation is important as several rounds of treatment may be necessary to remove or kill all eggs, nymphs, and adult bed bugs. Integrated pest management including sanitation, insect removal, and pesticide application may be necessary. The following controls may be undertaken by individuals and/or pest control professionals:

- Bag and wash all linens, bedding, clothing, drapes, etc., in hot water and/or dry on medium or hot heat cycles (120° F or above) for 10-20 minutes. This heat will kill all life stages of bed bugs. Dry cleaning will destroy the insects, but the items should be bagged

and the cleaner alerted to the bed bug infestation. If not washable, drying alone at high heat will also kill the bed bugs.

- Use a dedicated vacuum to remove the insects. Use the vacuum, along with a crevice tool and stiff bristled brush for no other purpose. Keep the vacuum and any tools in a closed bag when not in use, and discard the vacuum contents in a closed container. It may be particularly difficult to remove eggs as they are hard to spot and adhere to surfaces.

- Discarding infested furniture, moving furniture from walls, sealing cracks, crevices, and openings, and reducing clutter may be a necessary part of the treatment. If infested items cannot be treated, they should be covered and labeled as infested to prevent spread of the bed bugs to other rooms or buildings.

- Encasing mattresses and box springs by placing a zippered cloth or plastic mattress cover will restrict the bed bugs movement and feeding, but the covers must remain on for a year.

- The licensed pest control operator may use registered pesticides for residual control of the insects.

- Commercially available pesticides are not generally effective, or recommended for control of bed bugs in the home or other residential living units. Foggers and repellants are of no benefit with bed bugs.

- Normally, adjacent rooms are inspected and treated to ensure the infestation is controlled.

If you believe your accommodations have bed bugs, immediately notify your resident assistant or landlord. Remove no articles from the room. If you are suffering from bites, the BSU Health Clinic has health care professionals who can give advice on relieving your symptoms. If assistance is needed concerning control of bed bugs, contact BSU Work Control at 285-5081.