

## **BED BUGS: IDENTIFICATION, INSPECTION & TREATMENT**



Public health officials and pest control operators in northeast Ohio and across the country are responding to a significant increase in bed bug complaints. Bed bugs were once found only on bedding in homes, apartments, and rooming houses. Now they are found in office buildings, retail stores, hospitals, dormitories, nursing homes, libraries, movie theaters, buses, or any other place where people gather. The Center for Disease Control (CDC) and the Environmental Protection Agency (EPA) have declared that the bed bug is now a “pest of significant public health importance.”



**Bed bug eggs and cast skins**

### **Identifying Bed Bugs**

- Bed bugs are small, flat, oval, reddish-brown, wingless insects that feed on the blood of humans and other mammals.
- Adult bed bugs are approximately  $\frac{1}{4}$  inch long, about the size of an apple seed. Young bed bugs (nymphs) are quite small and when unfed they appear lighter and almost clear in color.
- Bed bugs do not fly or jump. However, they can crawl very fast.
- Female bed bugs can lay up to five eggs a day and five hundred during a lifetime.
- They are excellent hitchhikers and are easily spread by moving beds, furniture, luggage, clothes, or other possessions from one location to another.
- Anyone who comes in direct contact with bed bugs or their eggs can unknowingly carry them into their home or workplace.



**Fecal spots by outlet cover**

### **Bed Bug Bites**

- Bed bugs are primarily a nuisance to humans and are not known to transmit disease.
- Bites can cause welts which may become infected by excessive scratching.
- Bed bug infestations can cause anxiety as well as psychological and emotional stress.



**Welts from bed bug bites**

### **Signs of a Bed Bug Infestation**

Usually the first sign of a bed bug infestation is the appearance of red itchy welts on any bare skin that is exposed while sleeping. Be aware that not every welt or bite is due to bed bugs. Consult a medical provider with questions about unexplained bites or red welts.

Live bed bugs, eggs and cast skins indicate a bed bug infestation. Small black or rusty colored spots found on bed linens, pillows, or the mattress may be blood spots and bed bug droppings.



**Blood stains and fecal spots on a mattress**

### **Inspecting for Bed Bugs**

Bed bugs hide close to where people sleep. They prefer fabric, wood, and paper surfaces over metal or plastic. Look for live bed bugs, eggs, cast skins, and blood or fecal spots in these locations:

- |  |  |  |  |
|--|--|--|--|
| <input type="checkbox"/> mattresses            | <input type="checkbox"/> recliners             | <input type="checkbox"/> telephones      | <input type="checkbox"/> luggage                 |
| <input type="checkbox"/> box springs           | <input type="checkbox"/> baseboards            | <input type="checkbox"/> radios          | <input type="checkbox"/> futons                  |
| <input type="checkbox"/> head boards           | <input type="checkbox"/> behind pictures       | <input type="checkbox"/> televisions     | <input type="checkbox"/> gym bags                |
| <input type="checkbox"/> bed frames            | <input type="checkbox"/> under loose wallpaper | <input type="checkbox"/> stacks of books | <input type="checkbox"/> draperies &             |
| <input type="checkbox"/> upholstered furniture | <input type="checkbox"/> sleeper sofas         | <input type="checkbox"/> piles of papers | curtains   |
|  | <input type="checkbox"/> electrical outlets    | <input type="checkbox"/> back packs      | <input type="checkbox"/> stuffed animals         |
|  |  |  | <input type="checkbox"/> hollow furniture legs   |
|  |  |  | <input type="checkbox"/> door frames & hinges    |
|  |  |  | <input type="checkbox"/> wall / ceiling junction |
|  |  |  | <input type="checkbox"/> wheelchairs/walkers     |
|  |  |  | <input type="checkbox"/> bed side tables         |
|  |  |  | <input type="checkbox"/> edge of carpeting       |

## **Treating Bed Bug Infestations**

Complete elimination of a bed bug infestation can be a difficult process and may require the services of a knowledgeable and licensed pest management company. It may take several treatments to gain control over an infestation. If a “do-it-yourself” method is chosen, only use pesticide products that are labeled to kill bed bugs. Always read and follow the label directions before applying any pesticide product. Here are some additional tips to help eliminate bed bugs.

- Reduce and eliminate clutter. Do not keep piles of clothes, boxes, toys, shoes, etc. on the floor, under the bed, or in closets. They are prime hiding places for bed bugs.
- Heat kills bed bugs. Wash clothes at the hottest recommended setting. Tumble dry the clothes on high heat for at least 30 minutes (120° F or above).
- Encase an infested mattress and box spring in a zippered cover that is labeled and certified “bed bug proof.” Leave the covers on for at least one full year.
- Vacuum home thoroughly and often. Pay particular attention to the area around the bed and the bed itself. Sprinkle ¼ to ½ cup of talcum powder on the last section of floor to be vacuumed. The powder will help dry out and kill bed bugs in the bag or cup. Place the vacuum cleaner bag or contents in a sealable plastic bag and discard it in the trash outside.
- Pesticides labeled to kill bed bugs are available over the counter and may provide effective control. However, if the problem persists or is heavily entrenched, contact a knowledgeable, experienced, and licensed pest management professional for assistance.
- Since bed bugs are difficult to control, plan on several thorough treatments to eliminate an infestation.
- DO NOT USE “Bug Bombs”. These products may kill on contact but they are mostly ineffective against hidden bed bugs. They may make the infestation worse by scattering the bugs throughout the home or apartment.
- If an infestation is suspected in a rental unit, contact the building manager or landlord about the problem. Property owners should contact a professional pest control company for advice and assistance. The local health department can also provide assistance on bed bug identification, prevention and control options.
- The property manager and pest management professional may provide preparation guidelines prior to treating for bed bugs. Getting rid of bed bugs is a cooperative effort and these guidelines should be followed closely.



Wash sheets and blankets in hot water and dry them thoroughly in a hot dryer before making up the bed



A zippered bed bug proof cover can help protect against



Do not use foggers

## **Preventing Future Infestations of Bed Bugs**

- Do not bring discarded bed frames, mattresses, box springs, or upholstered furniture into the home.
- Carefully inspect used or rented furniture prior to bringing it into the home.
- Place any recently purchased clothes, whether new or second hand, into the dryer at a hot setting for at least 30 minutes (120°F or above).
- When traveling, inspect the bed, headboard, and furniture upon arrival. Keep suitcases off the floor and bed and inspect them before leaving. Wash and dry all clothing, per the above recommendations, after returning home.
- Caulk and seal any cracks and crevices throughout the home, especially in rooms where people sleep.
- Be careful of who stays overnight or sleeps at the house. Likewise, be mindful when staying away from home. Inspect all children’s backpacks, stuffed animals, and other belongings if they have stayed overnight or spent considerable time at another location.

