
Bed bugs and self-protection: Personal protection and avoidances

(For environmental health specialists, nursing home staff, home-care nurses, social workers and city inspectors)

Recognize a heavy bed bug infestation for a home visit or an inspection and avoid bringing bed bugs with you

1. Biology

Bed bugs take about 35 - 48 days to develop from egg to adult. Fully-grown adults (1/4 inch long) are brown, flat and as big as apple seeds. Immature bed bugs are lighter in color, white or yellow, when unfed. Blood-fed immature bed bugs can be red to brown. Eggs (1-2 mm) are small and white, but visible if laid on a dark surface. Adults can live 10 months. Bed bugs feed on blood exclusively and they survive well over 3 - 6 months without blood meals. They are nocturnal, hiding in the cracks and crevices, crawling out at night to bite people and other animals. They cannot fly or jump. **Bed bugs are not known to transmit diseases.**

Bed bugs can spread passively when carried occasionally on people or their belongings and they can spread actively between rooms or apartments when they seek blood meals.

2. Levels of Infestation (1 to 5)

Level 1 – One location. Bed bugs will be found mostly in the beds (box spring, bed frame, and headboard) or couches.

Level 2 – Two locations. Usually in bed and/ or headboard. Infestations can spread over time to nearby furniture (for example, bedside table and chest of drawers).

Level 3 – Infestations exist in baseboards and under carpets.

Level 4 – Bed bugs are living in wall-voids.

Level 5 – Bed bugs can be seen on walls and a ceiling in a room.

Early detection and monitoring transfer of a bed bug infestation is the key for effective control. The hitchhiking of bed bugs is less likely with low infestation. Any infestations of bed bugs need to be treated immediately.

3. Signs of infestation

Bed bugs leave **black fecal material** (digested blood) around their hiding places. Look for bloodstains, shed skins, live or dead bed bugs, or eggs. Crushed bed bugs and bloodstains on the walls mean a heavy infestation. Complaints about bites can be indicative of bed bug infestation, but not everybody reacts to bites. It is hard to tell a single bed bug bite from that of other insects, although the location and pattern of bites may give you a clue.

4. How to avoid bringing bed bugs home

During daytime home visits or inspections, chances of getting bed bugs may be limited, because bed bugs are normally active at nights and they tend to hide. However, bed bugs may come out any time of the day when they are seeking blood. Kitchens are less likely to be infested, and bedrooms and living rooms are more likely to have bed bugs. Look for signs of heavy infestations. That is when bed bugs are more likely to leave with you.

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| • Bring inside the minimum amount of items you need for work | • Do not place your work items on the floor or upholstered furniture |
| • Do not bring in coats, hat, gloves or clothing you may remove indoors | • Work on countertops, tabletops, or other solid elevated surfaces |
| • Do not sit on upholstered furniture, consider bringing your own stool or folding chairs | • Place work items in a container with a lid or a bag that can be closed when not in use |
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5. What to do when you get home

Here are some suggestions, if you think you have been working at a location with a high bed bug infestation. Remove clothes immediately, then wash and dry on hot cycle because bed bugs are highly sensitive to heat (>113° F). Items, that cannot be washed, can be placed in a dryer on hot cycle for 30 minutes. Things used for work can be left in your vehicle or outdoors. Use encasements on mattresses and box springs to make it easier to spot signs of bed bug. Be aware of any signs of bed bug infestation. If possible, collect samples to submit for identification.

For any additional questions on bed bugs, please contact:

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