



Reducing the Risk of Bed Bugs

Guidelines for Fire Departments

The following guidelines have been developed to help minimize the potential for transporting bed bugs to your workplace, home or into the community. Following these guidelines will also limit the potential for transporting other pests, such as cockroaches or fleas from the premises as well.

OFF-SITE PREPARATION

- Anyone who conducts visits to a home or apartment setting should become familiar with the basics of bed bugs – what they look like, how to identify signs of an infestation, and how to protect yourself from bringing them home or back to work with you.
- Bites cannot confirm the presence of bed bugs. Identification of an infestation may be made by seeing physical evidence such as fecal material, eggs, cast skins or bed bugs.

DURING A HOME VISIT

When going into a residence one must take on the mind-set of "extreme-precaution." With this in mind, one should rationalize the experience by assuming **beds, furniture, and other items are infested.**

- Carefully assess the dwelling upon entering – look for clutter and evidence of a pest infestation i.e. bugs crawling on floors or walls, insect feces on walls or around electric outlets and switches, brown stains or insect shells on mattresses. See Figures 1 through 4 which also show difference between cockroach and bed bugs.
- Avoid wearing pants with cuffs or shoes with laces. You may choose to put on protective shoe coverings (booties) before entering the dwelling, especially if it is a building with a known infestation.
- Try to limit the amount of items you take with you into the home or apartment.
- Never place items directly on a bed, cloth furniture, or carpeting. If items need to be put down, set on a hard surface such as kitchen counters or a table top.
- If you need to sit down during the visit, choose a wooden, plastic or metal chair, as bed bugs prefer soft upholstered furniture in which they hide.

- If any bed bugs or evidence of an infestation is observed, ask the resident if they are aware of any pest problem. If the dwelling is a rental unit, the resident should inform the building manager immediately. Early detection will assist in reducing the time and expense of treating and controlling bed bugs.
- Be aware of your surroundings and be careful of coming into contact with fabric, furniture, bedding, and walls.
- Remove your protective shoe covers (booties) after walking out of the home's entrance door. Place booties in a tightly sealed plastic bag and discard bag in an outdoor trash receptacle.
- Return to your vehicle, but prior to entering, perform a self inspection. It is important to always check for pests immediately after leaving someone's home and before entering another facility or a vehicle.
- Any items you brought with you from the dwelling should be placed in tightly sealed plastic bags prior to placing them in your vehicle if there is any chance you may have picked up any "hitchhikers".
- As additional precautions when one arrives at the station or home, remove work clothing over a non-carpeted floor and be ready to capture and destroy any bed bugs. Keep all items that are to be washed and/or dried in the sealed plastic bag until it is time to launder. Place your clothing in the dryer on high-heat for at least 20 minutes. In severely infested situations, one will want to change as soon as possible, and where appropriate, then place clothing in a bag to be laundered (one should keep a change of clothes in one's vehicle).
- Notify your supervisor in the event of finding evidence of bed bugs while performing the self inspection. It may be necessary to change into another set of clothing to minimize the potential for transporting bed bugs or eggs to your home or station. Any clothing potentially exposed to bed bugs should be promptly placed in a tightly sealed plastic bag and then washed and dried on a hot setting.

STATION PREVENTION AND EARLY DETECTION

An ounce of prevention is worth a pound of cure, and this is especially true with bed bugs. To prevent bed bugs, we recommend using the acronym - S.L.E.E.P.

- Survey the area for signs of bed bug infestations, such as red or dark brown spots on bed sheets.
- Lift the mattress, and other furniture items to look for bed bug hiding places.
- Elevate personal items or store them in tightly sealed plastic totes

- Examine personal items before returning home to prevent bed bug migration.
- Professional extermination services are recommended if bed bugs are suspected.

Simple repairs reduce the number of places bed bugs can hide. Simple repairs for the sleeping area include:



- ✓ Caulk with silicone sealant moldings and joints around the room perimeter (floor, doors, cabinets, and windows).
- ✓ Seal openings around pipes or other structures that come through walls, floors and ceilings.
- ✓ Repair peeling wallpaper.
- ✓ Repair cracks in walls or floors.
- ✓ Repair or replace damaged interior doors.

Furniture and Room Guidelines

Bed bugs thrive under certain conditions which are enhanced by the availability of hiding spots close to their human hosts. Bed bugs have a strong preference for paper, cloth and wood, over items made from metal and plastic. Porous surfaces provide more humidity and egg-laying locations. Furniture choices can greatly contribute to the control of bed bugs.

Guidelines for furniture include:

- Use metal frame beds and cribs to discourage bed bug hiding and egg-laying. If bed frames are wooden and cannot be replaced, fill gaps in frames, cracks, crevices, and holes with silicone caulk. This will allow for better inspection and reduce need for treatment. Painting furniture white will also allow for better inspection.
- Eliminate head boards completely. Bed bugs hide and develop in the cracks and crevices afforded by head boards.
- Use only white or light colored sheets. This will allow for better inspection.
- Pull the beds away from the wall and make sure the linens are not touching the floor.
- Use a monitoring device on each leg of the bed in order to keep the bugs from crawling up onto the bed. Monitoring devices can be purchased or you may use double-sided tape. **Note:** monitoring devices are designed to confirm the presence of bed bugs at all stages not manage an infestation.

- Avoid all –material, fabric furniture. Instead utilize items made from metal or plastic.
- Use of small, launderable cushions is one way to make employees more comfortable. Cushions should be dried on a hot setting for 20 minutes.
- Use laboratory-tested, bite-proof encasements on mattresses **and** box springs (they also have bed bug couch encasements). Encasements are zippered enclosures that cover bed components. Encasing both mattress and box spring eliminates the need to discard bedding.

FACILITY MONITORING

- Learn how to identify bed bugs and bed bug waste so you can spot an infestation early and take action. Conduct quick inspections of your station on a regular basis. See Polk County Manual for Prevention and Control of Bed Bugs, Inspection section.
- Use bed bug bite proof encasements which are zippered enclosures that cover bed components (mattress, box springs or couch). Encasements that are bite proof also prevent bed bugs from feeding while you sleep.
- Monitor to assess for re-infestation or future presence of bed bugs. A monitor gets in the bug’s pathway. Monitoring is most effective in a room where people regularly sleep. A trap can be created by applying double-sided tape or purchasing an interceptor device. This will either trap the bugs or show their fecal matter. If you find bed bugs or cast skins, you should contact your Pest Management Professional.

BED BUG IDENTIFICATION



- Bed bugs are flat, oval-shaped and very small in size.
- Bed bug hatchlings have been compared in size to poppy seeds.

- Adults can grow to 1/4 of an inch long.
- Bed bugs have 6 slender legs along with medium-long antennae at the top of their head.
- Bed bugs do not have any wings.

What Are the Signs That Bed Bugs Are Present?

They often hide unnoticed in dark crevices, and eggs can be nestled in fabric seams. Signs of bed bugs include fecal spots, blood smears on sheets, and the bed bug sheds of skin. They usually remain close to hosts, commonly in or near beds, couches, or where people sleep.

Bed bugs hide in:

- Mattress crevices
- Furniture crevices
- Wood trim
- Electrical outlets and devices
- Behind picture frames
- Bed Frames
- Bed bug bites usually result in red, itchy bumps. Some people, however, are not allergic to the bites and may not react.



***Note:** Bed bugs are not limited to beds and mattresses, they can also be found on couches, recliners and other upholstered furniture; as well as nightstands, dresser and in or on other furniture that is close to a person's sleeping area.

See Figures 1 and 2 demonstrating difference between cockroach and bed bugs:



Figure 1 Cockroach frass (feces)



Figure 2 Cockroaches and frass in a doorframe



Figure 3 Bedbugs on mattress



Figure 4 Bed bug hiding place where carpet meets wall

If the station is suspect of bed bugs contact a professional pest management company. A state certified pest management professional (PMP) with experience in controlling bed bug populations should actively participate in preparing a bed bug management plan for the situation. It is important to know that multiple methods might be needed to eradicate bed bugs, including pesticides, sanitation, and heat or freezing treatments. Ask the PMP to explain any potential side effects and precautions that you and co-residents must take. Multiple visits may be required.