

Controlling an Infestation

First, a thorough inspection of the affected house to locate bed bugs and their harborage sites should be conducted. Mattresses, box springs, bed frames, carpets, furniture, and cracks & crevices in walls/floors should be inspected and vacuumed thoroughly with a crevice tool. After vacuuming areas with bed bugs, eggs, and/or shell casings, immediately empty the dust bag into a plastic bag, seal it, and discard.

After vacuuming:

- Enclose the affected mattresses and box springs in zippered encasements that are rated to prevent piercing by bed bugs and their escape through zippers. Any bed bugs or eggs remaining on the mattress will be trapped inside the cover and starve to death.
- Wash bedding, pillows, and clothing in hot water or dry them in the dryer on the hottest setting for at least 30 minutes. Do not overload the dryer to be sure that the heat is evenly distributed.

Physical Barriers

Double sided tape placed on the legs of bed frames can prevent bed bugs from crawling onto the frame. Pushing a bed away from the wall and making sure sheets & comforters are not draping onto the floor can also help prevent bed bugs from crawling onto the bed. Traps and monitoring devices can be useful in detecting if there are bed bugs present or to monitor the success of a recent treatment.

If an infestation is too large or severe, these do-it-yourself treatment options may not work. Most people will try turning to pesticides, but common household products generally will **not** kill bed bugs and can cause them to spread and infest other parts of the home. Pesticides can also negatively impact the health of those living in a home.

It is best to hire a **pest management professional** to handle a severe infestation. Experienced companies know where to look for bed bugs, are schooled in proper techniques, and have an assortment of management tools at their disposal.

[Find a professional pest management company in your area:](#)

- ncpestmanagement.org/find-professional

Other bed bug resources:

- ncagr.gov/spcap/sleep/Bedbugs.htm
- nchealthyhomes.com/pests-and-pesticides/
- content.ces.ncsu.edu/bedbugs-biology-and-control



For more information, contact Union County Environmental Health:

- **Website:** unioncountync.gov/departments/environmental-health
- **Email:** unioncountyh@unioncountync.gov
- **Phone numbers:** 704-283-3553 or 704-283-3767

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Bed Bugs

What They Are, How to Identify Them, and Prevention & Treatment Options



Bed bugs are making a comeback in apartment buildings, dorm rooms, hotels, hospitals, and homes due to increased travel. Although not known to transmit disease, bed bugs can cause severe itching, loss of sleep, emotional distress, and secondary infections.

Identifying Bed Bugs

Bed bugs are parasites that bite people at night and hide during the day. They are tiny, less than $\frac{1}{8}$ inch long, wingless, chestnut brown in color, with flattened, generally oval-shaped bodies. When they drink blood, they become swollen, elongated, and dark red. Bed bug bites may cause itchy welts on their victims. Their small size enables them to hide almost anywhere in and around their feeding sites. They can hide on mattresses and bed frames, cracks and crevices in walls, under peeling paint, behind wall sockets, and many other places. The bugs themselves can often be difficult to spot, but bed bugs often leave small dark spots on sheets and other surfaces.

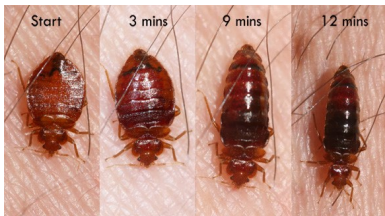


Figure 1: A bed bug changing shape as it drinks blood.



Figure 2: Bed bug and fecal smears on mattress.



Figure 3: Bed bug skins at the base of a headboard.



Figure 4: A bed bug compared to the size of a quarter.

How to Identify Bed Bug Bites

- Bed bug bites leave a reddish, slightly swollen welt that can resemble a mosquito bite, but typically lasts longer.
- The bites may be in a pattern of 2-4 in a row.
- Some people have stronger reactions to bites than others.



Integrated Pest Management

Integrated pest management (IPM) uses information about the pest in order to choose methods of control that are safest and most effective. IPM methods include pest prevention, exclusion, and non-chemical tools. If chemical pesticides are needed, products are chosen that pose the least risk to human health. With IPM, you start by asking, "Why is this pest here?" and try to remove the conditions allowing the pest to enter and live. This approach solves pest problems rather than just treating the symptoms. It also reduces the need to use pesticides repeatedly.

Prevention

Bed bugs cannot fly, so they infest homes by being transported in clothing, backpacks, suitcases, mattresses, or other furniture. They can also walk in from adjacent apartments or rooms through cracks or conduits for electrical wiring or plumbing. They search for a sleeping human by moving up walls, bed linens, bed legs, or anything touching the bed.

Some ways to prevent a bed bug infestation include:

- **During travel:** When you enter a hotel room, place your suitcase in the middle of the bathroom floor — do *not* place on the bed, couches, or carpet floor until checking for bed bugs. Lift the mattress to look for bed bugs or signs of them, such as small black dots left behind from dried blood and fecal matter. Check the mattress, box spring, headboard, lamp shades, sofa, electrical outlets, and any cracks and crevices in the walls. Bed bugs will hide in many places.
- **After travel:** Methodically inspect clothing and baggage after you have traveled. Place clothes in sealed plastic bags until they can be laundered. Bed bugs are sensitive to heat, so clothes should be washed in hot water and dried on a high heat setting.
- Avoid bringing used furniture and mattresses into your home, as they could be infested.
- Remove clutter from your home, especially in bedrooms.
- Seal crack and crevices, especially those that lead to other rooms/floors.
- Use light-colored sheets— it is easier to detect signs of bed bugs.
- Protect mattresses and box springs with tightly-fitted encasements that are designed to keep bed bugs either inside (where they starve to death), or prevent them from getting inside.