



Typical bed bug spots and smears on a mattress.



Typical bed bugs and spots on bedding



Bed bug spots under fabric stapled to the framing of box springs.



Bed bug spots near cracks of futon frame.

For pest resources, go to <http://lancaster.unl.edu/pest>

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Dealing with Bed Bugs

Photos by Vicki Jedlicka, UNL Extension in Lancaster County



Adult bed bugs are small, reddish brown, wingless and have very flat bodies.

Above — highly magnified view.

At right — actual size (3/8"–1/4").



Human bed bugs are found around the world and are spread when people travel. Since the year 2000, bed bug problems have gotten worse in the United States. Bed bugs may not carry diseases but they are still a problem. People living in homes with a bed bug problem find themselves worrying about the bugs and have a hard time sleeping.

It isn't easy to control a bed bug problem because it can take a lot of time and effort. The best control requires both nonchemical methods and careful use of insecticides.

nonchemical methods. By doing these things and working together with a pest control company, you'll help make the insecticides they use more effective.

- Don't expect instant success. Even professionals may have a hard time getting rid of bed bugs. A recent study showed that, after treating units in an apartment building, some units still had bed bugs after four treatments. In addition to insecticide treatments, these researchers vacuumed and removed clutter. They threw away furniture full of bed bugs and used steam-cleaning on mattresses. Bedding was washed every time bed bugs were found.

- Another problem is that some bed bugs may be resistant to common insecticides. This means even if insecticides are used, they won't be able to kill all the bed bugs.

Prevention—Tips for Travelers

If you are traveling, it is a good idea to inspect your motel room for bed bugs as soon as you first enter the room. The most likely hiding place is behind the headboard, but there are other locations, similar to those listed above (like the mattress and bedding). Hotel and motel bed headboards are usually fastened to the wall. You must lift the headboard off its hanger to inspect behind it. Even if you don't find bed bugs around the headboard, don't place your luggage on the floor near the head of the bed.

Authors: Barb Ogg and Soni Cochran, 2008

About Bed Bugs

Bed bugs are reddish-brown and do not have wings. They are usually very flat, except after they have just fed, when they are filled with blood. Adult bed bugs are 3/8 to 1/4-inches long. Young bed bugs look like adults, but are smaller.

Bed bugs feed on blood. They like human blood best which is why they live with us. But, they can feed on the blood of our pets, like cats, dogs and birds.

During the day, bed bugs hide in tight places near the bed or other places where you sleep at night. At night, the bed bugs come out of their hiding places to feed. They find you by sensing the warmth of your body. Bed bugs usually bite people on the neck, arm and shoulders. They can also bite legs or ankles. Some people are bothered by the bites which can become red and itchy.

Is it a Bed Bug?

Some other bugs that look like bed bugs feed on bats and birds. It is important to make sure you have bed bugs. Ask a pest control professional or contact the extension office for help identifying your pest. If the bug turns out to be a bat bug, you'll need to rid your home of the bats to solve the problem.

Where Do They Come From?

Here are some ways bed bug problems get started:

- If you stay in a hotel or motel with a bed bug problem, you can bring them home in your luggage.
- You buy or bring home used furniture with bed bugs already living in it.
- Bed bugs can hitch a ride by hanging onto clothing. (Be careful if you visit someone who has a problem with bed bugs.)
- Overnight guests or friends may bring bed bugs with them when they visit your home.
- If you live in an apartment, you can get them

from your neighbors. Bed bugs can move from room to room, apartment to apartment.

- If you move into a home or apartment with bed bugs, you'll have an instant problem. Bed bugs can live months without food so they can live in empty hotel rooms or apartments until people move in.

Where Do They Hide?

Bed bugs live in gaps, cracks and other openings around the bed. They leave dark spots or smears on sheets, mattresses or near their hiding places.

Almost all bed bugs live in the bed or within 15-feet of the bed. If people have been sleeping on sofas, bed bugs can be found there too. A few bed bugs may be found farther away from the bed. Bed bugs can crawl 20 feet in a night looking for a blood meal and then go back to their hiding place.

Check the Bed

- Take off all the sheets and blankets. Look for dark spots, smears and bed bugs.
- Look at the mattress and turn it over. Do you see any dark spots, smears or bed bugs?
- Move the mattress off the bed and turn the box springs over so you can look at it. Tear away the dust cover. Carefully look at the wood frame for cracks and gaps. These are places where bed bugs hide. Peel back the fabric where it is stapled to the wood frame, and look for bed bug spots near the staples.

Check the Room

- Near sleeping areas, look behind picture frames, in telephones or radios, even inside books.
- Remove the drawers from bedside tables and dressers. Look for dark spots, smears and bed bugs.
- Check behind the head of the bed and look for bed bugs where the carpet meets the wall.
- Carefully take off the covers around electrical outlets. Look for bed bugs in the outlet box.
- Don't forget the closet. Bed bugs will hang on clothing in closets.
- If people sleep on a sofa or other type of upholstered furniture, it also needs to be checked for bed bugs.

What You Can Do

If you rent, contact your landlord if you find bed bugs.

If a room has bed bugs, really clean it and get rid of clutter like piles of toys, magazines or clothes. Clutter gives bed bugs more places to hide.

Wash and then dry your bedding in a hot dryer. This will kill the bed bugs. Dry clean wool blankets.

If you find bed bugs, take extra care vacuuming these areas. Vacuum the mattress, box springs, furniture, beds, headboards, and sofas. Make sure you turn the box springs over and vacuum carefully. Vacuum the area where the carpet meets the wall, especially near the head of the bed. When you are finished, take the vacuum cleaner bag immediately to a dumpster or to an outside trash container.

You can use a hand-held steamer to steam clean the mattresses. This will kill the bed bugs and their eggs. Steam cleaning the carpets is also good and must be done before insecticides are used. If there is a serious bed bug problem, you may need to remove the carpet in the room.

If the mattress and box spring are in bad shape, throw them away. If the mattress is in good shape, it can be covered with a special zippered case made of tightly woven fabric. These cases are made for all sizes of mattresses. If you use a case on your mattress, keep it on at least a year to make sure all the bed bugs are dead. The box springs (or foundation) has even more hiding places than the mattress so it will also need a case.

Insecticide Treatments

Managing bed bugs is not easy:

- Vacuuming, removing clutter and putting your mattress in a case are all very important, but probably won't solve a bed bug problem. Bedrooms or other places where people sleep must be treated with insecticides.

- Treating bed bugs with insecticides should be done by trained pest control professionals. They have the right products and have special training to make sure these treatments are done safely. Apartment dwellers and homeowners should focus on cleaning, vacuuming and other