

Bed Bugs: Know the Facts



What are bed bugs?

The common bed bug (*Cimex lectularius*) is an insect that feeds on human blood. They are often found near sleeping areas in the seams of mattresses, box springs, cracks and crevices in bed frames, and usually spread to gaps behind baseboards, pictures, wallpaper and electrical outlets. They may hitchhike into a home on used furniture, clothing or other items brought from infested areas.



What do they look like?

Adult bed bugs are reddish-brown, wingless insects about the size of an apple seed (1/4 – 3/8 -inch long). When viewed from the side, they are flat, which is why they can fit into such narrow spaces. Newly hatched bugs are white or yellowish and resemble the adults, but are smaller. Bed bug eggs are white, about the size of a pinhead (1/10 -inch long) and are found in crevices in clusters of 10-50 eggs.



Can bed bugs cause disease?

Bed bugs are not known to transmit disease. Their bites are painless and typically happen at night while you sleep. Bed bugs feed for about three to 10 minutes before crawling off to a sheltered crevice. They will bite anywhere on the body, but especially on exposed areas such as the face, neck, arms and hands.

Some people are hardly aware they have been bitten, but others suffer an allergic reaction and may develop painful swellings similar to those associated with mosquito or flea bites. The bites may itch for up to two weeks before healing, so resist the urge to scratch to prevent a secondary, bacterial infection. Wash the bites with soap and water to reduce the risk of infection.

How can I prevent a bed bug infestation in my home?

Do not bring infested items into your home. It is important to inspect new and used furniture before bringing it inside by examining tight spaces along seams, around buttons and under cushions. When traveling, look for evidence of bed bugs, such as fecal spots on mattresses, before unpacking.



I think my home has bed bugs, but how can I be sure?

Unless an infestation is severe, you may not see bed bugs crawling out in the open. They prefer to hide in sheltered areas until they come out to feed, but you can find evidence of bed bugs. Check pillowcases, sheets, box springs and mattresses for their feces which looks like dark spots—as if someone touched a dark magic marker to the fabric. Examine the room thoroughly, especially the wall, baseboard, headboard and furniture near the bed. Use a flashlight to look behind and underneath furniture and woodwork.

How do I get rid of bed bugs?

There is no magic bullet to use against bed bugs. Once you have identified a bed bug infestation, you will probably require the help of a professional pest control specialist. But a professional can't do it alone. To get rid of bed bugs, you must remove clutter such as pictures, books and clothing from the infested area so there are fewer places for the bugs to hide. Vacuuming will remove some of the bed bugs, but the eggs are glued in place and can't be removed by vacuuming. When vacuuming, concentrate on mattress seams and around any tufts or buttons. Vacuum wherever your inspection revealed the presence of bed bugs—furniture, box springs, bed frames, floors and baseboards. Remove the vacuum bag immediately; place it in a sealed plastic bag and dispose of it outdoors.



Infested items such as clothing, shoes, bedding and blankets can be placed in a clothes dryer on high heat for 20 minutes to kill bed bugs and their eggs. Mattresses and box springs may be enclosed in bed bug-proof zippered cover to kill the bugs inside. The cover should remain in place for more than one year because bed bugs can survive a long time without feeding.



What about using pesticides?

Infestations will usually require the use of pesticides in conjunction with the cleaning and vacuuming methods listed above. Chemicals are most safely applied by a licensed professional. Professionals have access to the insecticides most effective against bed bugs and are trained in their proper application. However, if you plan to use pesticides yourself, be sure to use products labeled for indoor use, apply only to areas listed on the label and always follow label instructions. Improper application of chemicals is dangerous and may even make the problem worse. For example, bug bombs are not effective and may scatter bed bugs to other rooms or neighboring apartments. Repellents such as DEET do not work against bed bugs.

Who do I contact to have a bug identified?

If you find a bug and would like to have it identified, the Ohio Department of Health's Zoonotic Disease Program (ZDP) offers a free insect identification service.

You may contact ZDP at: **614-752-1029**
and press **[option 1]** for submission information.



For more in depth information about bed bugs, visit the following links.

Central Ohio Bed Bug Task Force

<http://centralohiobedbugs.org/>



Figure A: Two adults and one nymph (arrow) of *C. lectularius*, collected in a hotel in urban Georgia.



Figure B: Close-up of one of the adults in **Figure A**.



Figure C: Higher magnification of the specimen in **Figure B**. Note the reduced forewings (arrow).



Figure D: Ventral view of the specimen in **Figure B**.



Figure E: Higher magnification of the specimen in **Figure D**, showing a close-up of the typical hemipteran piercing-sucking mouthparts (arrow).



Figure E: Nymph of *C. lectularius*. The blue marks represent 1 mm.