



Bed Bug Resident Education

- Within the pest control industry there are two basic ways to kill bed bugs, by using chemical (in the form of liquids, aerosols, or dusts) or by using heat.

- **Identifying a Bed Bug**
 - **What is a bed bug?**
 - A bed bug is a small insect that is found indoors and whose preferred hosts are humans. Bed bugs are a widespread pest. They are mostly nocturnal and are often found on beds and in bedding material. Their attraction to carbon dioxide along with the darkness of the night makes people sleeping in beds the perfect hosts for feeding. Although their feeding time is generally between 2:00 – 5:00 am, a bed bug will feed anytime that an opportunity presents itself.

 - **Is there more than one kind of bed bug?**
 - There are several species of bed bugs. Most of the species look similar, and they are all parasites that feed on warm-blooded hosts. Related species such as the bat bug prefer to feed on bats and other wild hosts but will also feed on humans if given the chance. However, only two of the known species of bed bugs in North America have any interaction with humans and are officially classified as a bed bug. Limited information is available pertaining to most of the other species.

 - **What does a common bed bug look like?**
 - Adult bed bugs are about ¼ inch long and are normally reddish-brown in color. Their body color depends upon how long it has been since they have eaten. A bed bug that has just finished eating will be a bright red color as opposed to a darker red-brown color when it has eaten several days previously. They have an elongated oval shape with a flattened body. Their six legs are located near the front of the body, and they have an antenna on either side of their mouth.

 - **How big are bed bugs?**
 - A mature bed bug is generally the size of a large apple seed. Bed bug eggs are white or translucent, shaped like a tiny pellet, and about the size of a large grain of salt. The nymphs (bed bugs that have recently hatched) go through several life stages and range in size but can be about the size of a piece of flat white rice.

- **What are the symptoms of a bed bug bite?**

- Bed bug bites produce a small red welt. These welts can be either flat or raised. They will normally present themselves within an hour of the bite; however, some may not be noticed for 12-24 hours. Bites may result in localized painful itching and swelling, which if scratched, could possibly lead to a bacterial infection.

Usually, there will be several bites as opposed to a single bite like a spider bite. The bites from a bed bug could be in a straight line or row or in a grouping. The bitten area will usually itch, and depending on skin composition, the bite can blister as well.

- **Is it painful to get bitten by a bed bug?**

- The bed bug bite is a subtle action. It is not felt like the bite of a horsefly or the sting of a wasp. Most times, a bed bug bite will be undetected until the red welt appears. The bed bugs' mouthparts are positioned for precise piercing of the skin and sucking blood. They have very tiny needlelike, slender, surgical probes called stylets that are inserted into the skin and are withdrawn after feeding. During feeding, the bug injects saliva that contains various protein fractions, some of which have anticoagulant properties. It has been stated that bed bugs inject an anesthetic, although none has yet been identified.

- **Will bed bug bites make you sick?**

- Bed Bugs are a public health pest but have not been known to transmit disease. To date, there are no proven cases of bed bugs being an infectious agent in transmitting illness or disease. Therefore, bed bugs are considered a low risk of danger.
- Bed bugs have the potential to make you sick by way of a reaction. Although many people have absolutely no reaction at all from a bed bug bite, some people will have an allergic reaction with an itching sensation. Reactions will vary in different individuals. Some people will see a reaction to a bed bug bite the following morning while others may not see a reaction for several hours after the bite. Adverse effects from bed bug bites seldom have had any type of fatal outcome. Once a person is removed from contact with bed bugs, symptoms will normally resolve within seven days.
- Although they do not transmit disease, bed bugs do contribute to the possibilities of physical pain and irritation as well as mental distress including paranoia, obsessive behavior, nightmares, and anxiety.

- **Preventing Bed Bugs**

- **What can I do to prevent getting bed bugs?**

- Thoroughly inspect the areas that you visit which are inhabited by people—especially rooms with beds or lounging furniture such as a hotel, dormitory, or vacation home.
- Be aware that clutter is an attractive place for bed bugs to hide. Avoid having piles of clothing, stacks of old magazines, books, and newspapers laying around. These are places that bed bugs will be attracted to once an infestation has begun to build.

- **Is there a natural deterrent that I can use for bed bugs?**
 - There are some things that bed bugs dislike such as some essential oils, black walnut, peppermint, dryer sheets, and rubbing alcohol. Remember that these products are helpful when used as a deterrent, but they are seldom a sufficient solution for eradicating bed bugs.

- **Can you get bed bugs just by being around someone who has bed bugs?**
 - Yes, you can. Bed bugs can be transferred off clothes, handbags, backpacks, suitcases, or other personal belongings. They are known for their hitchhiking abilities. They will drop from a jacket or from the fold of a shirt onto your furniture, hitchhike in a bag, and now they are in your house too.

- **Identifying Bed Bugs in your Property or Home**
 - **How do I know if I have bed bugs?**
 - Finding fecal smears and spots on bedding materials such as pillowcases, sheets, and mattresses is a good indicator that a bed bug has been active in the area. The fecal smears consist of digested blood that is normally a dark brown or rust color. Also, you may see eggs or beginning stages of bed bugs crawling in or around the bed. Heavy infestations of bed bugs may emit a raspberry-like odor.
 - Mattresses color is a good indicator that a bed bug is active. Some of the most common ways to confirm their arrival is by experiencing bites, noticing bloodstains on the bedsheets, finding fecal matter on the bedding, seeing shed skin casings, smelling a unique or different smell, or through the use of a bed bug monitor.

 - **If I find a bed bug in a bedroom, does this mean they are in all of the rooms in my house?**
 - No, not necessarily. A thorough inspection of the entire house is recommended. However, generally, bed bugs will be discovered in a sleeping or lounging area long before they migrate into a non-occupied area.

 - **Why do some bed bugs look different than another bed bugs in the room?**
 - If you are seeing bed bugs that look different from each other, it is most likely because they are in different stages of life. Bed bugs have seven different life stages. Their life begins as an egg which is about the size of a couple grains of salt. Larva hatch from the tiny eggs which then grow into nymphs. The nymphs grow through a few more stages and then eventually into a mature adult bed bug.

Bed bugs are sometimes different colors. Nymphs are translucent but have a white or yellowish color. A bed bug can be a bright red color just after completing a blood meal. As the bed bug slowly digests the blood, the body color will fade to a brown and will eventually darken to black. As the nymphs mature and advance to the next life stage, they will shed their exoskeleton skins, leaving behind the casings. All the different stages may give the appearance that there are different bugs present.

 - **How do I check for bed bugs?**
 - It is best to start your search in areas where people sleep such as near beds and lounge furniture.

- Pull all the covers back so that the mattress is completely exposed. Check the ribbing around the edge of the mattress – this is a place that bed bugs love to hide. Check in any folds or creases in the mattress. Move the mattress enough to be able to see the box spring. Many times, there are screens or a mesh that is stapled to the bottom side of the box spring set. This is a very important place to look as bed bugs are nearly always found tucked away under these edges.
 - Check the headboard carefully. Using a flashlight, inspect the bed construction joints that are either nailed or glued together. Any grooves in the composite or wood, any cracks, or cosmetic divots in the headboard are perfect places for a bed bug to hang out when they are not feeding. Both sides of bed rails and cross member braces should be inspected thoroughly as well.
- **Do I need to be concerned if I have only seen one bed bug?**
- Finding a single bed bug is not a time to panic – it may have simply hitchhiked a ride on your jacket, you happened to see it just as it fell off, and you were able to kill it. If this is the case, it was your lucky day. Most people are not so fortunate because usually, where there is one, there will be more lurking in the shadows. Also, it should be noted that one impregnated female bed bug can lay up to five eggs in just one day.
 - A bed bug is a very fertile insect and can continue laying eggs for several weeks after a single mating. So, even one bed bug has the potential of becoming a big problem. If you have found just one bed bug, do not assume it is alone. Do a thorough search for any companions that may have traveled with it.
- **What is the first thing I need to do when I find a bed bug in my house?**
- The very first thing to do if you think you have found a bed bug in your home is identify it correctly. There are a variety of tools that can be used for identification. If you have an Android phone, your camera has a Google Lens that will capture an image and search Google for a matching image. The same tool can be used on an iPhone by opening the Google app. If identification is still an issue, you may want to capture the bug and speak with a pest control professional regarding proper identification.
 - Once you have properly identified the bed bug, you will want to investigate the mattresses in each bedroom and the couch. Knowing how far the infestation has spread will help in deciding how to proceed with treatment and how extensive the treatment will need to be.