



First Response BED BUG SYSTEMS



Instructions For Use plus Bed Bug Inspection and Identification Guide

Bed bugs are expensive to control and extremely tough to get rid of once they infest a room or building. Detecting them before they spread is the most important part of keeping these pests out of your life! The following steps will help you to be proactive in avoiding and controlling bed bugs.

INSPECT - IDENTIFY - TREAT - MONITOR

How to inspect

Bed bugs are night-biting insects, so you may not see them during a day-time inspection. They are flat and like to hide in small cracks and crevices, out of the light. During your inspection, look for live bed bugs, as well as their cast skins, eggs and fecal spots (see below). In early infestations, you will probably spot their signs before the actual bugs. A bright light and/or a magnifying glass may help you search. Detecting a small bed bug population is incredibly difficult. If you don't find signs of bed bugs but think you may have them, contact a Pest Management Professional.

Begin by looking for bed bugs and their signs around your bed, as bed bugs like to stay close to their food source (you!). You will need to pull back the sheets and check all the mattress seams by spreading them with your fingers, on both sides of the mattress and box spring. If possible, flip over the box spring and inspect the interior. Also check the cracks and corners in and behind the headboard, and other furniture within 6-12 feet of your sleeping area.

What you might see



From left to right: juveniles (J) and cast skins (CS) in a mattress seam; juvenile and fecal spots (FS) on a sheet; juveniles, cast skins, and fecal spots in carpet; and a harborage, including adults (A), juveniles (J) and fecal spots (FS) on a wall corner.

Some Common Bed Bug Hiding Places



A bit of bed bug vocabulary:

Cast skins: these are left behind when the bugs grow and molt. They look like hollow, straw-colored adults.

Eggs: Look like tiny white grains of rice. Can be laid alone or in clusters.

Fecal spots: Small, black, tarry dots. Usually found in and around harborages, also often seen on sheets and pillowcases.

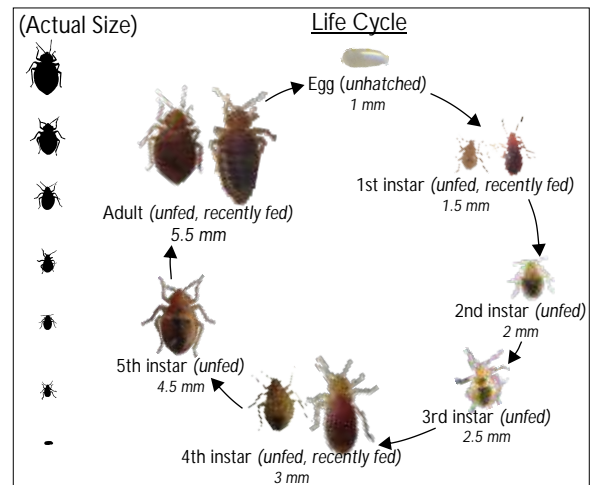
Harborage: A place where groups of bed bugs like to hide and lay their eggs. Often identified by masses of black fecal spots and cast skins.

Juvenile: Also called a nymph or an instar, this is any immature bed bug. Smaller and lighter colored than the adults.

Other places to check for bed bugs:

- Under lamps on desks or tables
- Behind electric outlet plates
- Behind loose wallpaper
- Behind mirrors and picture frames
- Beneath loose flooring
- Behind or under cables and pipes
- In and around the edges of carpeting
- Inside screw holes, such as in wooden furniture
- In cracks, seams and joints of furniture
- In upholstered furniture, especially couches or other places people sleep
- Behind, under and between cracks in molding and baseboards
- In drapes, storage boxes, stuffed animals, electronics, appliances, luggage...

Identification Guide



- All bed bugs have flattened bodies, six legs and no wings.
- Adult bed bugs are reddish-brown, and about the size of an apple seed.
- Newly hatched nymphs are off-white and very difficult to see, about the size of a sesame seed.
- Bed bugs grow by molting between each instar stage, leaving behind cast skins that look like ghostly versions of live bed bugs.
- The juvenile stages (nymphs, or instars) look like smaller, lighter colored versions of the adults, darkening with each molt.
- They have horizontal strips across their abdomen, which stretch once the bed bug has fed. All stages must feed on blood, and will appear to have red or black abdomens after feeding.
- Eggs are a grayish-white, laid singly or in small clusters within their hiding spots.
- All stages of bed bugs feed on blood. They prefer to feed at night but will come out in the day if they are hungry.
- Bed bugs feed about once a week, but can survive for 6-12 months without eating. You cannot "wait out" bed bugs - if their food source leaves, they will often migrate, spreading the problem to other rooms or neighboring apartments.
- Bed bugs are not known to transmit any diseases through their bites.
- Not everyone reacts to bed bug bites. If you do react, the bites usually look like small, intensely itchy bumps to large welts, and often last much longer than mosquito or flea bites. The reaction can also take a week to appear after being bitten, so no bites does not mean no bed bugs!

You might find one of these insects in your trap or during a room inspection. These insects are NOT bedbugs, but may be mistaken for them. If you are not sure if an insect is a bed bug, check with a licensed Pest Management Professional (PMP) in your area.

1		1. Carpet beetle: Very round, usually black or spotted in color	
2		2. Head louse: Tiny, translucent, usually in human hair.	
3		3. Body louse: Tiny size and translucent, usually found on the body or clothing.	
4		4. Cockroach: Much bigger than adult bed bugs. Wings.	
5		5. Flea: Flat side-to-side. Large hind legs.	
6		6. Mite: Very small, eight legs, color variable.	
7		7. Small ticks: Eight legs, usually have a soft sac-like body which swells greatly with feeding. Feed for days at a time with head buried in host skin.	
8		8. Fruit fly: Translucent wings. Large red or black eyes. Body black or brown, with a striped abdomen.	

Treatment - some do's and dont's

DO

- Hot wash and/or hot dry everything (bedding, clothing, shoes, soft bags, etc.) that can tolerate it. Encase clean items in sealed plastic bags to prevent them from becoming re-infested.

- Clean your mattress and box spring (steam clean or vacuum), then encase them in bed bug-proof mattress encasements. Isolate your bed by moving it away from walls and placing moat-style traps underneath the feet.

- Seal all cracks and crevices in the affected rooms, including furniture joints, around decorative wall strips, loose wallpaper, edges of flooring, etc. This will limit their hiding places.

- Make sure you get information from reputable sources. You can't trust everything on the internet! Federal, state and local agencies and universities are generally reliable sources of information.

- Finally, contact a Pest Management Professional (PMP) who is trained specifically for bed bugs. While it is possible to treat on your own, your chances are much better with a PMP. A list of trained PMP's in your area may be found at the National Pest Management Association's website, www.pestworld.org

DO NOT

- Don't use pesticides that are not labeled for indoor and bed bug use, especially on your bed. They can have severe consequences if not used properly, especially for pets and small children.

- Don't move to another sleeping area. If you move to a couch or another bedroom, the bed bugs will follow you, spreading and making the problem more difficult to treat.

- Don't use flammable home remedies such as gasoline or alcohol. Any spark or ignition source (such as a cigarette) can easily ignite the fumes. Such treatments are dangerous and generally ineffective.

- Don't immediately discard everything. Carrying infested items out to the trash can spread the problem. Most items can be encased or treated. If things such as mattresses are too heavily infested to be treated, completely encase them in plastic and clearly label them as "infested with bed bugs" before removing them from your home.

- Don't forget to empty the vacuum cleaner! Once you are done vacuuming cracks and crevices, immediately remove the vacuum bag, wrap it in plastic, and dispose of it outside.

Tips For Travelers

In a hotel: Before bringing your belongings into a hotel room, carefully inspect the beds and furniture for signs of bed bugs. If you find bed bugs, leave the room immediately, inform hotel management, and relocate to another room or hotel. Do not bring any of your belongings into the infested room. If you don't see bed bugs during inspection, set up a First Response Bed Bug Monitor, following the included instructions. Set a new trap every night. Leave your luggage off the floor and away from the bed, such as on the luggage rack or on a hard, light colored surface, such as a counter top or the hotel bathtub. Make sure to check your traps and reinspect your luggage before leaving.

In planes, trains, etc.: Bed bugs can be transferred between bags in luggage compartments. For checked bags, hard plastic suitcases are preferable because they provide less hiding places for bugs than cloth baggage, and have no zippers that bed bugs can crawl through. Wrapping the contents of your luggage in plastic before leaving home can also help prevent the bedbugs from getting into your belongings. Bed bugs have also been reported in airplane cabins. For carry-on luggage, inspect your seat and luggage compartments before settling in. If you see bed bugs, make sure to report them to airline staff.

Returning home: Always inspect your luggage and its contents before you enter your home. If you suspect you have been exposed to bed bugs, you should seal your belongings in plastic before entering your home or vehicle. Unpack outside, if possible. Any belongings that can be washed, dirty or not, should be washed in hot water and dried. Use dissolvable laundry bags if possible. Everything else should be dried in a tumble dryer on high heat for at least 30 minutes to kill bed bugs and their eggs. For larger items like suitcases, vacuum thoroughly and dispose of the vacuum bag immediately. Sensitive items may be dry cleaned, but please seal them in plastic and inform the dry cleaners that there may be bed bugs present.



First Response Bed Bug Monitor

Don't bring bed bugs home with you! This trap is designed for short stays in hotels, hostels, and any other travel situations where you may encounter bed bugs. Each trap works for one night, monitoring your room while you sleep. If any bed bugs are in the traps by morning, you will be able to take action to prevent any from coming home with you. Lightweight, disposable and easy to use, these traps are designed with the smart traveler in mind!



1) Add 1 tablespoon (6 ml) warm tap water in hole of lid of plastic cup to activate the Carbon Dioxide Generator. Bait will overflow if too much water is used. *Bait packet in cup will dissolve in water.*



2) Remove release paper from sticky trap quickly and cleanly. Pull diagonally from corner to corner. Place baited cup on the circle on the sticky trap.



3) Activate heat pad by opening pouch and place on the rectangle on the sticky trap. Heat pad is activated by exposure to air.

4) Open small plastic vial lid and pour pheromone on heat pad. Place empty vial next to heat pad on the trap.

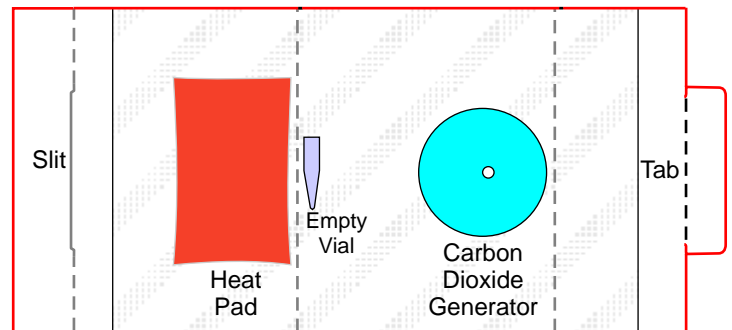
5) Carefully fold the trap up to form a triangle, taking care to keep the generator level and on the bottom of the trap. Tuck tab in slit.



ALSO AVAILABLE FROM SPRINGSTAR

First Response Bed Bug Trap

Use this trap to detect infestations early! Designed for long-term monitoring, this durable, discreet trap attracts and catches bed bugs for up to two weeks with each bait packet. Bed bugs are drawn onto the capture pad by the powerful lures in the trap, which mimic the smells of their natural food source. The bait and capture pads can be easily replaced to continue surveillance. Perfect to monitor your home and work spaces!



Helpful Hints

- 1: Set monitor after 8pm or before you go to bed.
 - 2: Place the traps on the ground by the head of your bed. OR;
 - 2: Trap can be set on box spring at the head of the bed, just move the mattress over.
- DO NOT PUT TRAP BETWEEN MATTRESS AND BOX SPRING!**

Additional suggested resources*:

- The Center For Disease Control's (CDC) bed bug website: <http://www.cdc.gov/parasites/bedbugs/>
- The Environmental Protection Agency's (EPA) bed bug website: <http://www.epa.gov/bedbugs>
- A search tool provided by the EPA, where you can look for pesticides that are registered for bed bug treatment: <http://cfpub.epa.gov/oppre/bedbug/>
- Bed Bug Registry is a free, public database for user-submitted reports of bed bug sightings across the United States and Canada. This is a good resource to consult before traveling, to see if your intended hotel has an active bed bug infestation: <http://bedbugregistry.com>
- A well-researched, informational website, with contributions from university entomologists. Contains current bed bug news, discussion boards and forums, and additional photos of bed bug infestations: <http://bedbugger.com>
- The National Pest Management Association's website. This site contains listing of local Pest Management Professionals, and tips on how to select a qualified professional: <http://www.pestworld.org>

* SpringStar is not responsible for maintaining any of the suggested websites, and cannot guarantee the accuracy of the information found within. When in doubt, please consult a licensed Pest Management Professional.