

You are not alone!

Bed bug infestations are on the rise. As people travel more, the bed bug goes along. They are found in all parts of the world, in all social and economic groups regardless of income or type of dwelling. From movie theaters to 5 star hotels coast to coast. When traveling, be sure to pull back the bed sheets to look for the telltale brown spotting on the sheets. If using dressers, pull the drawers out to look for eggs or adults. Leave your luggage bag zipped up.

When you return home wash and dry ALL clothes even if unworn. Inspect the luggage bag and any items that are not washable.

How long until they die?

Except for the “thermal” option, most chemical applications will kill the adults and immature bugs in a few hours. The eggs may not be in contact with the pesticide and

thus may need multiple treatments to get rid of. Eggs hatching in the 10-day period are likely to be killed during the two-week treatment interval.



Egg sack of a bed bug.
(Photo courtesy of Gary Alpert Harvard University)

My room is clean, now what?

Take all of the precautions that are listed in this brochure. If there is an outbreak in a building, monitor the garbage area to make sure no one is collecting infected belongings and spreading the problem to another apartment. Conceal infected items in plastic bags. A high regimen of cleaning is required by the occupant to prevent an opportunity for the bed bugs to surge back. This is a several month battle of which the outcome depends on the one-two punch. It requires everyone’s cooperation and a coordinated plan to effectively kill bed bugs.

People who frequent second hand stores should keep purchases sealed in plastic bags until they can

be washed and dried. Used furniture should be thoroughly steam cleaned by a professional before bringing into a room. Used furniture should be inspected closely and if suspect, discarded. Apartment managers should have an action plan in place before an outbreak. They should monitor their tenants and investigate any complaints in a timely fashion to avoid expanding the problem. Be sure the problem is resolved before bringing any new furniture or mattresses into the dwelling.

How to win the battle of the bed bug?

As with most human linked infestations, cleanliness is a common denominator. We like to use the phrase “**fastidious cleaning**” which means a systematic and comprehensive program that assures no part of the room is missed or under cleaned. With that mind-set, the battle against the bed bug can be won.

Helpful websites with more information

EPA

<http://www.epa.gov/bedbugs>

CDC

<http://www.cdc.gov/parasites/bedbugs/>

Wisconsin Pest Control Association

<http://wisconsinpest.com/>



Presented and distributed by the

Wood County Health
Department

How to Deliver a One- Two Punch to Bed Bugs!



(Photo courtesy of Gary Alpert Harvard University)

Tips for property owners and tenants to deal with a tough to kill pest that requires everyone’s participation to eradicate

Why do I have bed bugs?

Bed bugs don't travel far, which is why humans are the main reason they spread. Travelers leaving their suitcases open can allow the bed bugs to hitch a ride. People bringing in used furniture or clothing can spread the bugs throughout a building. Any time sanitation conditions lapse, these bugs will expand their turf.

Where do they hide?

Bed bugs are flat and can hide in narrow spaces. They like the area under a



(Photo-Ken Lambert/Seattle Times/MCT)

mattress near the human host. They are found behind mirrors, headboards, wall molding and pictures, under chairs, in furniture cushions or seams, cracks in the wall, and electric outlets. They generally are a few feet from where someone sleeps. Look for blood spotting on the sheets or around pillows. Small brown spots and red rash-like itching sores are telltale signs of a problem. So far, no disease transmission has been linked to the bed bug.

What's the one-two punch?

A two-step process is required to effectively deal with bed bugs. The first punch is to eliminate the adult population with sprays or other treatments. The second punch is to stop the transmission to other locations. Both the landlord and the tenant have a shared responsibility to eliminate this pest. If one end fails, the pest will return. Cooperation is the key.

Who can I call?

After finding evidence of a bed bug, contact your landlord and contact a professional exterminator. They are listed on the internet and in the business yellow pages. Check their references and experience with bed bugs. Some have bed bug sniffing dogs trained to locate bed bugs. Check with the Better Business Bureau to determine their performance record. Toll free in Wisconsin (1-800-273-1002).

What works best?

The type of treatment varies by the degree of infestation. A single bed bug may simply require fastidious cleaning to get rid of. **Most cases will require professional help.** If an infestation is discovered, orders to exterminate will be issued. Some pest control companies will not treat until excess clutter or garbage is removed. After the owners have done their job, the tenants must follow through with their share which could range from extensive cleaning to discarding infected belongings.

Keeping the bed bug out requires numerous timely and repetitive steps:

- Mattress and box spring must be encased in zippered plastic sheets.
- All clothes, linens and bedding should be washed in hot water and hot dried before storing in a secure container or bag.
- Vacuum the unit and discard the vacuum bag.
- Reduce clutter to remove bug hiding places.
- Bed bugs are tough to kill. One adult can lay 2-5 eggs per day which hatch in 10 days. An adult may only need to feed once a month. Hence many first infestations will likely require multiple treatments and repeated applications of pesticide to control. Treatments are usually applied every two weeks for three months.
- Follow the directions of the exterminator. Various treatments may involve the application of a spray or powder. Ask the exterminator for vacuuming instructions.
- Neighboring rooms or closets may need treatment. Closets are typically contaminated from luggage. Don't forget about your car, purse or other bags! They may have hitched a ride.
- Special precautions may be needed for pets as the treatment may be harmful to animals. Keep cats or dogs away from treated areas.

- Some treatments may require the disassembly of furniture components. Dressers with drawers may need to be treated. Box mattress may need the bottom cover removed. It may be best to discard if severely infected.
- If discarding mattresses or belongings, render them undesirable by cutting or marking them so others do not spread the infestation. Slash the mattress with a knife or smash furniture or spray paint it with an "X".

Other treatments?

One of the sure kill methods for severe infestation is to do a "thermal remediation". This process involves super heating the room for a period of time. This process literally dries out the adults and their eggs for a complete extermination. The downside is that it is costly. It is approximately \$1,000 - \$6,000 per home. The up side is belongings stay in place and only things that melt need to be removed. In one shot it is done, not weeks.



Life cycle of the bed bug, starting from the top left, moving counterclockwise: eggs (1mm), 1st stage nymph (1.5 mm), 2nd stage nymph (2 mm), 3rd stage nymph (2.5 mm), 4th stage nymph (3 mm), 5th stage nymph (4.5 mm), unfed adult (5.5 mm) and fed adult. Photo courtesy of Stephen Goggett, Department of Medical Entomology, Westmead Hospital, Sydney, Australia.