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 strata regardless of income or type of dwelling. From movie theaters to 5 star hotels coast to coast, bed bug complaints are on the rise. When traveling, be sure to pull back the bed sheets to look for the tell tale 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 wash ALL clothes in hot water even if unworn. Inspect and put the luggage bag away from other clothing.

How long until they die?

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

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.

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 in hot water. Used furniture should be throughly 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

http://www.epa.gov/pesticides/bedbugs/index.html

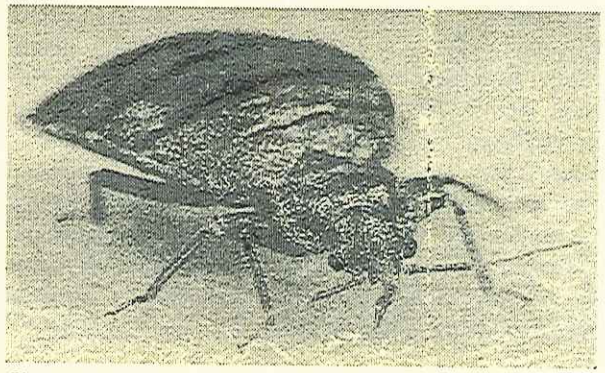
http://abcnews.go.com/GMA/video/thermal-remediation-kill-bed-bugs-11522150

http://www.cdc.gov/nceh/ehs/publications/bed_bugs_cdc-epa_statement.htm

http://www.city.milwaukee.gov/dns

Presented and distributed by the
City of Milwaukee Department of Neighborhood Services

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

City of Milwaukee
Department of
Neighborhood
Services
(414) 286-2268

DNS-311 Bedbugs V1 TNW 11/09/2010

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?

(Photo-Ken Lambert/Seattle Times/MCT)

Bed bugs are flat and can hide in very narrow spaces. They like the area under a 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, electric outlets or any small openings. They generally are a few feet from where someone sleeps. Their "creep factor" is high as they come out at night and feed on the blood of their host. Look for blood spotting on the sheets or around pillows. Small brown spots and red rash-like itching sores are tell tale signs of a problem. So far, no disease transmission has been linked to the bed bug. Bed bugs are very hard to kill.

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 or if the owner, 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 sources of bed bugs. Check with the Better Business Bureau to determine their performance record. Toll free in Wisconsin (1-800-273-1002).

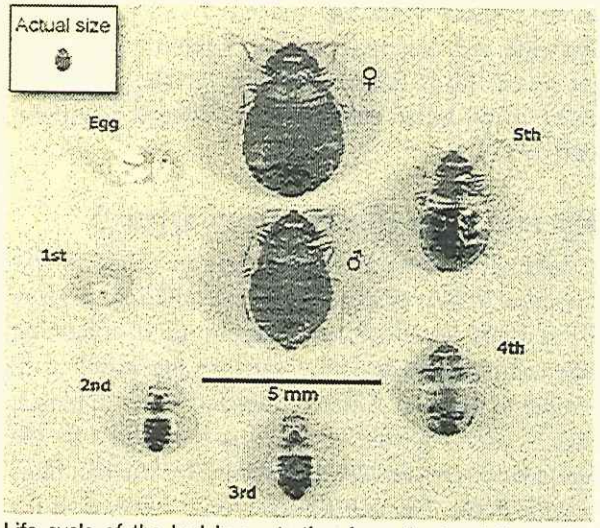
What works best?

The type of treatment varies by the degree of infestation. One bed bug may simply require fastidious cleaning to get rid of. More serious cases may require professional help to assess and treat. The EPA has banned popular pesticides to which some pests have become immune. Treatments for animals cannot be applied to humans because of various health risks. If an infestation is discovered by DNS, we will write an order to exterminate. 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 stored in clean areas.
- Vacuum the unit and discard the vacuum bag.
- Use boric acid around the headboard and baseboards and under the bed to treat your unit daily. Or you can spray rubbing alcohol around the same areas daily. Be sure there is no open flame or spark and vent after treatment.
- Reduce clutter to remove hiding places.
- Bed bugs are tough to kill. One adult can lay 500 eggs which hatch in 10 days and can survive up to two years. 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.
- Various treatments may involve the application of a spray or powder. Do not vacuum in those areas where the pesticide was applied. Follow the directions of the exterminator. Allow four weeks for the pesticide to dry before vacuuming.
- Anywhere the bed bug can hide is an area of concern. Adjacent rooms or closets may need treatment. Closets are typically contaminated from luggage. Don't forget about your car or purse! They may have hitched a ride.
- If you have birds or fish tanks be sure to take special precautions 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 mattresss may need the bottom cover removed. It may be best to discard if severely infected.
- If discarding mattresses or belongings, render them undesireable by cutting or marking them so others do not spread the infestation. Slash the mattress with a knife or break up 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 heating the room to 114 degrees for a period of one hour. 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 upside 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.