Message from the Editor

Bed bugs have arrived in Chicago! Luckily, Safer Pest Control Project (SPCP) is now Chicago’s delegate agency responsible for providing the City guidance on the emerging city-wide bed bug problem. SPCP is dedicated to reducing the health risks and environmental impacts of pesticides while providing individuals and organizations with information on safer and better methods for pest control. Each issue of this newsletter will work to put to rest common myths and misconceptions about bed bugs. Our hope is that the news, tips, and techniques reported on will help those most in need keep on top of the bed bug problem. In addition to newsletters, we will be focusing on educating residents, housing managers, city employees and others to prevent, identify and safely treat bed bug problems. Most experts agree that public education and awareness are our best defenses against bed bugs.

We hope you find the information contained in these newsletters valuable.

Tips and Techniques for Controlling Bed Bugs

Successful bed bug control needs to be approached from many angles. Cooperation of the occupant, the owner and the pest control professional is essential. Here are a few tips and techniques on how to inspect, prepare, and treat for bed bugs.

How do I know if I have bed bugs?

It’s much easier to control bed bugs if the problem is caught early. One pregnant bed bug can result in 30,000 more in just six months. A quick response is vital. Bed bugs stay hidden most of the time and only come out to feed for a few minutes every few days. However, there are many ways to find out if you have bed bugs. Here are some examples.

You may have bed bugs if:

1. You are waking up with itchy red bites.
   Bed bug bites usually appear in a line or circle and resemble mosquito bites: small, red anditchy. Responses to bites vary, and many people do not show bites at all. This limits the ability to detect an infestation early through bites only.

2. You see live or dead bed bugs.
   Bed bugs look different depending on their age. The eggs are white-ish, oval and very hard to see. Older bed bugs can be seen with the naked eye. Young bed bugs are amber colored. Adults are flat, oval-shaped and roughly the size and color of an apple seed. All become bright red in color and noticeably larger after feeding.

You are most likely to see them in dark, undisturbed places such as the box spring, behind the headboard, and along the frame. Look on the mattress itself: check the seams, zipper and around the tag.

3. You see staining or shed skin.
   Blood stains can be left on sheets after feeding. Bed bugs also leave dark brown/black fecal stains and shed their outer layer of skin. Stains and skins tend to accumulate around their hiding places. Shed skins are difficult to see due to their see through amber color. (See reverse side for more pictures)

If you see any of these signs take action immediately. Finding out that bed bugs are present is the first step toward treating the problem.
Bed Bug Reality Check 101: Fact or Myth?

When it comes to bed bugs, there is a lot of bad and possibly dangerous information out there. Every issue we will target a few myths to help set the record straight.

Myth #1: You’ll know if you have bed bugs because you’ll have bites that are red and itchy.

Fact: Actually only about 30% of people react to bed bug bites with red itchy welts. Most people don’t react to the bites at all but some people have terrible allergic reactions that can lead to infection and scarring. Don’t rely on reports of bed bug bites as your only monitoring tool. Nothing can substitute for good education and regular inspections for identifying a problem early.

Myth #2: Sleeping with the lights on will stop bed bugs from biting.

Fact: Sleeping with the lights on may make you feel better, but it doesn’t stop the bed bugs from biting. Bed bugs will feed no matter how bright and sunny it is where you’re sleeping. Bed Bugs are attracted to the CO2 you exhale and your body heat, light or no light.

Upcoming Events

SPCP will be at the Greater Auburn Gresham Development Corporation’s 2nd Quarter South Delegate Regional Workshop on Friday May 21st, 11:30a-1:30p to talk about bed bugs. Contact Safer Pest Control Project for more information.

SPCP is always looking for opportunities to hold workshops and coordinate events. Any interested organization can contact us at (773) 878-7378 ext. 207. We can currently conduct training in English and Spanish, and have some materials available in Chinese as well as English and Spanish.

Go to www.midwestpesticideaction.org to download bed bug factsheets and other useful information.

A Landlord’s Bed Bug Survival Kit

Bed bug control requires much more than a spray can of pesticides. In fact bed bugs are resistant to almost all commonly available pesticides. So, what’s a landlord or building manager to do? Here is what anyone managing a multi-unit building needs to do to control bed bugs…

I. A good bed bug factsheet to distribute to all tenants, ideally before an infestation is found. Better yet, give it to a tenant when they sign a lease.

II. A system for disposing of all furniture so infested pieces are not brought back into your building. This is one of the most common ways bed bugs spread to other units. Note: Most infested furniture and belongings can be treated. Disposal is a costly last resort.

III. Trained staff: Send maintenance, management, and housekeeping staff to get bed bug training. The more they know, the more likely they are to be able to get on top of the problem fast.

IV. A system for tenants to report suspected bed bug problems. Avoid blame. You want to know ASAP, so open the lines of communication. Fast reporting leads to fast action to prevent further spreading and helps limit the cost of control.

V. A well qualified professional pest control operator with experience controlling bed bugs. Ask for references and training. Be suspicious of guarantees. Experienced providers will give minimal guarantees because of how bed bugs spread.
Message from the Editor

Good News! The City of Chicago and the State of Illinois are beginning to take the bed bug problem seriously. Illinois has recently passed a new law that will set up a Bed Bug Task Force whose primary job is to report to the state legislature on bed bugs—what is being done and what should be done. In addition, Chicago has begun to track the number of bed bug problems reported to 311. Although it is in the early stages, eventually the data collected will help the city get a clearer picture of the bed bug problem and focus its efforts. Look for more details on these two efforts in the next B.I.T.E. Back newsletter.

Tips and Techniques for Controlling Bed Bugs

Successful bed bug control needs to be approached from many angles. In this section, we’ll highlight ways to inspect, prepare, and treat for bed bugs. This issue we’re focusing on the basics of how to inspect for bed bugs.

Where to Inspect for Bed Bugs in Your Home?
One thing we know for sure about bed bugs is that they like to live near where we sleep. This fact helps to focus where to look for bed bugs. Any inspection needs to start around the sleeping areas.

What’s a Sleeping Area? Bed bugs don’t care if you sleep on a mattress, the sofa, or a pile of hay. If someone sleeps or naps there regularly, that’s a sleeping area. Even a chair used for long periods of sitting is a sleeping area to a bed bug.

The 70-20-10 Rule is used to inspect for bed bugs. It says that:

- **70%** Most bed bugs will be found on the bed which includes the mattress, box spring, head and foot boards.
- **20%** Some bed bugs will be found in the area 6 to 8 feet directly around the sleeping area such as the night stand, picture frame, alarm clock, stuff stored under the bed, books, etc.
- **10%** A few bed bugs will be found in other places outside of the 6 to 8 feet around the bed. These areas include the closet, clutter, other furniture, electrical outlets, bookshelves, and so on. Bed bugs living in those places are the toughest ones to find and control.

Inspect carefully in and around sleeping areas. Focus on small, dark, tight places where bed bugs like to live. Using a flashlight and magnifying glass will help. Look for live or dead bed bugs, eggs, shed skins, or droppings (see B.I.T.E. Back, Vol. 1 for pictures at www.midwestpesticideaction.org).
**Bed Bug Reality Check 101: Fact or Myth?**

There's a lot of bad information out there about bed bugs. Let's set the record straight.

**Myth 1:** Bed bugs can spread diseases between people.

**Fact:** Unlike other biting insects like ticks and mosquitoes, bed bugs have never been shown to spread diseases from one person to another. Bed bugs can cause other health problems like sleeplessness, stress, and discomfort from itchy bites, but they don't spread viruses or bacteria between people.

**Myth 2:** Only pesticides or other chemicals will kill bed bugs.

**Fact:** Actually, there are very few chemicals that kill bed bugs. Scientists are hard at work looking for better treatments. Luckily, bed bugs are very sensitive to heat. For example, a clothes dryer that heats to at least 120°F will kill bed bugs and their eggs on clothes, bedding, and other household items. Special heaters can also be used to get rid of bed bugs in a room, apartment, even an entire house. The best thing about using heat, besides its ability to kill bed bugs, is that it leaves no toxic chemicals behind that might affect the health of people and pets living in the building.

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**So you think your neighbor has bed bugs?**

Here are a few steps to help protect your home and belongings from becoming infested.

✓ Pull your bed and other bedside furniture away from the wall.
✓ Remove any items stored under the bed and other clutter. Seal them in a plastic bag or bin if they can't be thrown away.
✓ Vacuum the bed, furniture, rugs and floors well and often. Seal and discard the vacuum bag as soon as possible.
✓ Buy a bed bug mattress cover – make sure the zipper is well sealed so bed bugs can't get in or out.
✓ Wash and heat dry (>120°F) bedding as often as possible.
✓ Always be on the lookout for signs of bed bugs when changing sheets and cleaning (see B.I.T.E. Back, Vol. 1 for pictures at www.spcpweb.org/residential).
✓ Use any pesticide with caution. Remember...
  • Pesticides are poisons designed to kill living things and can cause health problems for people and pets.
  • Always read and follow directions when using a pesticide.
  • Use only products designed to control bed bugs and never use pesticides on beds or people that aren't specifically designed for that purpose (read the label).
  • Avoid using pesticides unless it's necessary. No pesticide product can prevent a bed bug infestation.

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Go to www.midwestpesticideaction.org to download bed bug factsheets and other useful information.
Message from the Editor
Since our last newsletter there has been lots of Chicago media attention on bed bugs. WGN, WTTW, and WMAQ all ran television news stories and the Chicago Tribune saw fit to publish a few stories as well. It’s amazing how the closing of the flagship stores of Abercrombie and Fitch, Victoria’s Secret, and Nike Town (all in NYC) due to bed bugs can get the word out. In this case the ‘word’ is, ‘Bed bugs are back in a big way!’ We here at SPCP have felt the surge in interest. In addition to the media outlets calling us for information, we’ve received many requests from Chicagoans – ranging from individuals to institutions – looking for help dealing with their bed bug problems. We hope that this volume of B.I.T.E. Back! helps answer some of those questions. Spread the word.

Tips and Techniques for Controlling Bed Bugs
Successful bed bug control needs to be approached from many angles. In our last two issues, we showed you how to identify bed bugs and inspect for them. In this issue, we’re focusing on safe and effective ways to control, prevent, and treat bed bug problems.

Contrary to popular belief, bringing back DDT will not solve the bed bug problem. Wild bed bugs (any bed bugs not born in a lab) can resist the killing effects of DDT and many other commonly used pesticides. The good news is that there are many other actions to take and tools to use to control and kill bed bugs.

Here are three basic techniques for controlling bed bugs:

1) Batten down the hatches!
   Prepare your space well.
   • Caulking and sealing: Sealing spaces such as cracks and crevices will prevent both the movement of bed bugs and reduce their hiding places. Any cracks or crevices on walls, along baseboards, or in furniture (especially furniture close to the bed) should be painted or caulked.
   • Vacuuming and cleaning: Vacuuming is a great way to get rid of bed bugs or knock down their numbers fast. Use a crevice tool or vacuum wand to get into hard-to-reach places. Scrape the surface as you vacuum to help remove eggs as well as bed bugs. Make sure to empty the vacuum’s container or bag often – seal it in a plastic bag and throw it away outside as soon as possible. Wipe off dead bed bugs, blood stains, and droppings with hot, soapy water.
   • De-cluttering: Bed bugs love to hide in the folds of stacked clothing, magazines, newspaper, or other clutter. Getting rid of stuff is a good way to prevent and eliminate bed bugs. The more clutter that you can get rid of, the fewer places you’ll have to look for signs of bed bugs. Store loose clothes and other items in sealed plastic bags or tightly sealed containers. Remove any items that are stored under or near the bed.

2) Heat it up! Temperature is a great tool for killing bed bugs.
   • Clothes dryer: Heat-drying clothes and linens for at least 20 minutes in a clothes dryer on high heat will kill all stages of bed bugs. Studies have shown that dry items put in a standard home clothes dryer kills 100% of bed bugs and their eggs in as little as 5 minutes. Even most ‘dry clean only’ items can be put in a clothes dryer without risk of damage as long as they are not wet when put into the dryer. It’s not necessary to wash items before drying, but it can only help.
   • Steam cleaning: Steam cleaning is a great way to kill bed bugs and their eggs. There are many steam cleaners on the market for consumers. You’ll want one that gets up to at least 180 to 200°F for maximum killing potential and has multiple

(Continued on reverse side)
Bed Bugs and Pesticides

Bed bugs have developed an extraordinary resistance to most classes of pesticides. This means that a chemical-only approach will not work. The best solution is to combine non-chemical treatment options with targeted pesticide use. Any pesticide used should be labeled specifically for bed bug control.

NEVER USE:

- **Bed bug bombs:** Every expert will tell you that one of the worst things you can do is use an insecticide bomb against bed bugs. The bomb may cause the bed bugs to move to other rooms or units, deposit harmful pesticides on every horizontal surface in your home, and NOT solve your bed bug problem. Steer clear of all of these products.

- **Pesticide products on beds:** Pesticides must be labeled for use on beds or furniture. Before using any product on the place you sit and sleep, make sure you explore all other less toxic options.

- **Pesticides labeled 'DANGER':** There are pesticides that are created to be used by professional pest control operators only. This may be because they are extremely toxic or special training is required for proper use. If the label says, 'DANGER,' then leave its use to the professionals.

- **Agricultural pesticides:** Agricultural pesticides are created to be used outside by farmers and other trained professionals. Never use these products or any other pesticide not labeled for indoor, consumer use to control bed bugs.

- **DDT:** Using DDT is illegal in the U.S.A., and bed bugs are resistant to its killing power. Even if DDT were made legal again, it would not work because of bed bugs' extraordinary resistance to this and most other types of pesticides.

3) Better living through chemistry? Use pesticides with great care.

Most chemical treatments (pesticides) available to the average consumer do not work well against bed bugs. None of them work against bed bug eggs. Here are some basics about what works and what doesn't. **CAUTION:** All pesticides are poisons and can cause serious injury or health problems especially in children. Always read and follow the directions on the label.

- **Diatomaceous Earth (DE):** This powder, made from crushed fossils, kills bed bugs and is generally considered non-toxic as long as it is not inhaled. It will continue to kill any hatching larvae as long as it remains dry. DE is meant to be used in the cracks and crevices that bed bugs like to call home, and not sprinkled in an open area. This powder is often used in combination with other chemical pesticides to help provide some long-lasting control.

- **Permethrin:** Many bed bug pesticide products available to consumers contain a version of this pesticide – look for ‘-thrin’ as part of the active ingredients name. We know that bed bugs are resistant to these pesticides and their eggs are not affected at all, but they can help to kill some of the bed bugs present. Always use these products as directed. **SPCP** recommends that these products be used sparingly and applied directly to areas where bed bugs hide.

**Bed Bug Reality Check 101: Fact or Myth?**

**There’s a lot of bad information out there about bed bugs. Let’s set the record straight.**

**Myth 1:** Bed bugs are only found in cheap motels and low-income housing.

**Fact:** Bed bugs are just as likely to be found in 5-star hotels and luxury condos as in bargain roadside motels and public housing. Bed bugs are great hitchhikers, moving easily from one place to another on or in clothing, furniture, suitcases, purses, boxes, and other items. Bed bugs become quickly established anywhere they have access to people.

**Myth 2:** You need a microscope to see bed bugs.

**Fact:** While their tiny pearly-white eggs may be hard to see, adult bed bugs are visible with the naked eye. An adult is oval, flat, and reddish brown in color. It’s roughly the size, shape, and color of an apple seed when fully grown — a bit larger just after feeding.

Go to [www.midwestpesticideaction.org](http://www.midwestpesticideaction.org) to download bed bug factsheets and other useful information.

Midwest Pesticide Action Center is dedicated to reducing the health risks and environmental impacts of pesticides and promoting safer alternatives.

4611 N. Ravenswood Ave., Suite 107, Chicago, Illinois 60640 Tel: 773-878-7378 Fax: 773-878-8250 Web: [midwestpesticideaction.org](http://midwestpesticideaction.org) Midwest Pesticide Action Center is funded in part with a grant from the City of Chicago Department of Housing and Economic Development.
Message from the Editor

It’s been a busy year in Chicago, in Illinois, and internationally for bed bugs. Chicago is collecting data on bed bug infestations, the Illinois Bed Bug Task Force has convened its first meeting, and international attention is being focused on controlling bed bugs. In this newsletter, we will report on what’s been happening and how that will affect many of you and your communities. We hope you will pass on this important information to your colleagues.

News

Bed bugs have been making headlines in 2010 across the country. It seems that, no matter where you turn, someone is talking about bed bugs. The first ever Bed Bug Summit, organized by Bed Bug Central and held here in Chicago this past September, brought out local and national news organizations (http://www.nabedbugsummit2010.com). Topics ranged from the latest nifty inventions, to the newest scientific research on bed bugs. The conference helped focus national attention on the problem. It is now very clear that bed bugs are a major concern in all communities.

In Chicago, the Department of Public Health has put together the maps on page 2 based on bed bug problems reported to 311. Each dot represents one bed bug call. As you can see, the problem is spreading throughout the city. Keep in mind, these are only reported bed bug problems and are primarily rental apartments. Many people try to deal with bed bugs themselves or with the help of a professional without ever notifying 311. Therefore, it’s safe to assume the problem is much larger than the maps show.

Also in the News

A survey of national and international pest control companies was done by the National Pest Management Association and University of Kentucky. Reporting from every continent other than Antarctica (43 countries in all), pest control companies are seeing a rise in bed bug calls. In fact 20% of pest control companies reported over 100 bed bug jobs in the last year – this is more than triple the percentage just 2 years ago (6%).

The percentage of pest control operators reporting having had more than 100 bed bug jobs in the last year (black).

The same survey also documented how bed bugs are appearing almost everywhere, “…from homes to hospitals to high-end clothing stores…” Bed bugs are good hitchhikers, so they can pop up as a problem almost anywhere people and their stuff go.

Pest control companies’ guesses as to why there’s such a steep rise in bed bug problems were all over the map. The truth is no one really knows. As the report concludes, “…it remains a mystery why we are seeing such an abrupt increase…” after so many years of very little contact. However, most professionals agree that a lack of public awareness, increased international travel, and people having too much stuff all play a big role in the bed bug comeback.

If you’d like to read the full report of this survey, go to http://tinyurl.com/39a9x57 or do a web search for Bugs Without Borders – Executive Summary: Defining the Global Bed Bug Resurgence.
Bed Bugs: January - March 2010

Bed Bugs: July - September 2010

Community Area Name
1. ROGERS PARK
2. WEST RIDGE
3. UPTOWN
4. LINCOLN SQUARE
5. NORTH CENTER
6. LAKE VIEW
7. LINCOLN PARK
8. NEAR NORTH SIDE
9. EDISON PARK
10. NORWOOD PARK
11. JEFFERSON PARK
12. FOREST GLEN
13. NORTH PARK
14. ALBANY PARK
15. PORTAGE PARK
16. IRVING PARK
17. DUNNING
18. MONTCLARE
19. BELMONT CRAGIN
20. HERMOSA
21. AVONDALE
22. LOGAN SQUARE
23. HUMBOLDT PARK
24. WEST TOWN
25. AUSTIN
26. WEST GARFIELD PARK
27. EAST GARFIELD PARK
28. NEAR WEST SIDE
29. NORTH LAWNDALE
30. SOUTH LAWNDALE
31. LOWER WEST SIDE
32. LOOP
33. NEAR SOUTH SIDE
34. ARMOURED HOUSES
35. DOUGLAS
36. OAKLAND
37. FULLER PARK
38. GRAND BOULEVARD
39. KENWOOD
40. WASHINGTON PARK
41. HYDE PARK
42. WOODLAWN
43. SOUTH SHORE
44. CHATHAM
45. AVALON PARK
46. SOUTH CHICAGO
47. BURNSIDE
48. CALUMET HEIGHTS
49. ROSELAND
50. PULL MAN
51. SOUTH DEERING
52. EAST SIDE
53. WEST PULLMAN
54. RIVERDALE
55. HEGEWISCH
56. GARFIELD RIDGE
57. ARCHER HEIGHTS
58. BRIGHTON PARK
59. MCNINLEY PARK
60. SPENCER PARK
61. NEW CITY
62. WEST ELSDON
63. GAGE PARK
64. CLEARING
65. WEST LAWN
66. CHICAGO LAWN
67. WEST ENGLEWOOD
68. ENGLEWOOD
69. GREATER GRAND CROSSING
70. ASHBURN
71. AURUM CITY
72. BEVERLY
73. WASHINGTON HEIGHTS
74. MOUNT GREENWOOD
75. MORGAN PARK
76. OHARE
77. EDGEWATER
The City and State’s Bed Bug Responses – What’s Happening Now

Various agencies from the Illinois and Chicago Departments of Public Health, the U.S./Illinois Department of Housing and Urban Development, U.S. Region 5 Environmental Protection Agency, and Chicago City Hall are all working to develop policies and regulations around the control of bed bugs. Illinois now has a Bed Bug Task Force that met for the first time in December. Although most of these agencies have not finalized any plan or policy, they are using the experience and leadership of New York City as a guide.

The NYC Bed Bug Advisory Board came to the conclusion in 2010, “that bed bugs are a pest of public health importance due to the emotional and psychological impact that they can have on those affected.” Based on that conclusion, recommendations for action were developed, including: increasing bed bug education; establishing procedures for detection; treatment, and disposal of infested items; and modifying housing policy. After ten years of suffering from bed bugs, considerable pressure from the fair housing community and retail and real estate businesses, NYC has finally committed $500,000 toward making the Board’s recommendations a reality. You can find the complete report at http://council.nyc.gov/downloads/pdf/bed_bugs_report_2010.pdf.

Final Word

Safer Pest Control Project is committed to seeing Chicago, and Illinois as a whole, adopt a level of commitment similar to that of New York City. Working with the Illinois Bed Bug Task Force as well as other city and local agencies, our hope is that Chicago will never see the bed bug levels experienced in other cities. We encourage you, your neighbors, and community leaders to engage your elected representatives on the subject of bed bugs and push them to take action now.

Go to www.midwestpesticideaction.org to download bed bug factsheets and other useful information.
Message from the Editor

And...we're back and so are they! Bed bugs have not gone away with the turning of the new year. In fact, if the experiences in other cities are any indication, since our last newsletter (Jan. 2011), they’ve quite possibly doubled their numbers in spite of our best efforts. Chicago has just started to educate its citizens on this problem, and although we’re making headway, there’s still a long way to go. However, there is some good news out there: new products, new techniques, and new legislative action have emerged. Read on to get details on what’s happening.

New Bed Bug Laws Taking Shape:
Bed Bug Management, Prevention and Research Act (HR 967) proposed in Congress

U. S. Representative Jean Schmidt (R-Ohio) introduced the Bed Bug Management, Prevention and Research Act (HR 967) in the U.S. House of Representatives on March 9th, 2011 and has, as of this writing, been referred to the House Committee on Agriculture.

HR 967, as an amendment to the Food, Agriculture, Conservation, and Trade Act of 1990 and the Federal Insecticide, Fungicide, and Rodenticide Act, would, “…support efforts to control and eradicate bed bugs with respect to public health, and for other purposes.” The amendment if adopted would:

1. Establish a Bed Bug Research Program to allow federal funds to be used for research into basic bed bug biology and the development of better treatment and control products and methods.

2. Establish a Bed Bug Task Force to help award those grants.

3. Change the Criteria for Registration of a public health pesticide to allow for the use of currently banned pesticides for bed bug eradication.

4. Require Efficacy Data, even for exempted pesticides (i.e., those which are exempt from EPA registration due to low toxicity), to help protect consumers from products that don’t work.

5. Establish a Bed Bug Prevention and Mitigation Pilot Program to help fund State and housing authorities’ efforts in, “(1) addressing persistent bed bug infestations; and (2) whose residents lack the financial resources to adequately mitigate bed bug infestations without assistance.”

Safer Pest Control Project will be keeping close tabs on this act as it moves through the legislature. We will be weighing in on issues of concern such as allowing the use of previously banned pesticides for bed bug control, and we’ll keep B.I.T.E Back! readers informed of any developments.

Bed Bug Products: Do They Work?

Dozens of new bed bug products enter the market each week. Like it or not, bed bugs are a growing industry, and many folks are looking to make a profit off these little creatures. Not all products on the market to combat bed bugs are equal, and many do not require proof that they work*. In fact, many do not work at all against bed bugs no matter what manufacturers may claim. Here is a list of some products that SPCP, with consultation from trusted sources, recommend to safely fight bed bugs.

Protection: These products are designed to kill bed bugs on or keep bed bugs off your stuff.

Steam Cleaners: There is good evidence that these cleaners will help control bed bugs as long as the steam reaches 200°F or hotter. A decent steam cleaner will cost about $200 for personal use with professional machines costing $2,000 or more.

*There are pesticides called minimum risk pesticides that are not subject to federal registration requirements because their ingredients, are considered safe. Data supporting effectiveness is not required since registration is not required.

(Continued on reverse side)
Mattress Covers/Encasements: These products won't prevent a bed bug problem but will protect your mattress from bed bugs. The cost ranges from $35 for a box spring to $100 for a mattress encasement. Similar types of covers are available for sofas and upholstered chairs.

PackTite® Portable Luggage Heater or other heating devices: These types of devices must heat the items placed inside all the way through to at least 120°F to kill bed bugs.

Detection: These devices are used to detect bed bugs that have entered your space. They are designed to trap or attract bed bugs so you can find them early, before the problem grows.

Glue traps: There are many different devices using “sticky” technology. They all work similarly: place the trap near sleeping areas where bed bugs are likely to be, and check them for signs of bed bugs. Glue traps are cheap and easy to use but need to be placed carefully for best results. Cost ranges from $1 to $15.

Bed Bug ClimbUp Insect Interceptor: Developed by a research entomologist, this device is intended to be used around the legs of a bed. The idea is to trap bed bugs in the bowl areas since they can't climb out. The benefit of this device is the ability to detect whether the bed bugs are coming from off (outside pitfall) or on (center well) the bed. The cost is about $25 for four.

Passive and Active Monitoring Traps: Designed to be placed on or near the bed, these devices attract bed bugs by offering them a cozy place to hide. Once the bed bugs are in the monitoring devices, they get stuck and can't get out. The difference between the passive and active traps shown here is that the active trap adds a heat source to entice the bed bugs inside. The cost is around $20 to $25.

None of these products will prevent bed bugs from entering your living space. In fact, no product can do this. All of these products need to be used in combination with good inspection and control methods. Check out volumes 1 through 3 of the B.I.T.E. Back! newsletter at midwestpesticideaction.org for more information.

Chicago Bed Bug Reporting System and Website
Do you think your apartment, home or building is infested with bed bugs? Chicago has set up a new system for reporting bed bug problems. Here’s what to do:

1. Dial 311 to report instances of bed bug infestations in your home or building. Your information will be forwarded to the Department of Buildings.
2. You can also file an online complaint with the Department of Buildings at http://tinyurl.com/chicagobedbugreport
3. The Department of Buildings will determine whether or not to inspect your building.
4. Information is also sent to the Chicago Department of Public Health (CDPH) to track the spread of bed bugs.
5. For more information please visit the City of Chicago website at http://tinyurl.com/chicagobedbuginfo
6. The City also encourages you to report the purchase of mattresses or furniture infested with bed bugs. Go to http://tinyurl.com/chicagofraudcomplaint.

The City of Chicago website has adopted SPCP’s fact sheets and other information regarding bed bugs and has posted it online. You can also go to www.spcpweb.org/residential to download the SPCP bed bug fact sheets and other useful information.

Go to www.midwestpesticideaction.org to download bed bug factsheets and other useful information.
Right now, it may seem like the Wild West out there in our fight against bed bugs. However, there are some current laws that can help the average person combat this miniscule, yet mighty invader. Laws are enacted to help us level the playing field, better assign responsibilities, and protect us against threats and hazards. In this issue, B.I.T.E. Back! focuses on the laws used to negotiate our relationship with bed bugs and each other. Check out both their strengths and weaknesses. There’s also a piece on how to protect yourself when entering a potentially bed bug infested living space. You don’t want to walk out with an unwanted companion. Good advice for all of us.

What Does the Law Say: Who’s Legally Responsible for Bed Bug Control?

People call Safer Pest Control Project (SPCP) all the time looking for information about bed bugs and other types of pest control. The most frequently asked questions go something like this:

“I have bed bugs and I know they came from the apartment next door. What are my responsibilities for paying to get rid of them?” or,

“My tenant has bed bugs. Don’t they have to pay to get rid of them?”

Although SPCP subscribes to the no-finger-pointing school of thought, there are five laws and ordinances currently in effect that begin to address the bed bug issue in Chicago. Here’s a brief description of each:

1. Three Illinois laws — the Structural Pest Control Act (225 ILCS 235), Illinois Pesticide Act (415 ILCS 60) and the recently enacted Bed Bug Task Force amendment (225 ILCS 235/10.15) — regulate how, when, and by whom pesticides can be used. The Task Force amendment requires Illinois to study the problem and recommend solutions with a final report due in December 2011.

2. The Chicago Building Code (13-196-630) outlines residential building owners and operators’ responsibilities. It states that every owner or operator of a residential building is responsible for extermination if an infestation is caused by a failure to maintain the dwelling in a “reasonable…insect-proof condition,” or the infestation exists in two or more family units or the public areas of a building with two or more units.

3. The Residential Landlord Tenant Ordinance (RLTO), which regulates landlord-tenant interactions, applies to Chicago residential building owners and tenants. A similar ordinance is in effect in Evanston, IL. It requires landlords to provide prompt repairs and tenants to allow reasonable access to their living space once given at least two days notice. It also provides tenants with remedies for unresponsive landlords and protection from retaliation.

Strengths and Weaknesses of the Current Laws

The graphic below shows what aspect of pest control is regulated by each law. These laws are written to address pest issues generally. None of them say anything specific about controlling bed bugs.
(Strengths and Weaknesses of the Current Laws, continued)

The trouble with all of these laws is their lack of bed bug specific detail. For example, the State laws regulate what pesticides can be used and the licensing of pest control operators, but do not provide any specific training or certification for bed bug control. The Chicago building codes say that owners need to maintain the building in a ‘pest proof’ manner, but it is impossible to pest proof a building against bed bugs. Bed bugs hitchhike on us and the things we carry, and they spread quickly. Therefore, waiting until there are two or more units infested is too late to begin treatment for bed bugs.

The RLTO does assign some general responsibilities to tenants and landlords that are helpful for fighting bed bugs and provides protection to tenants against retaliation or revenge. Minimizing retaliation is important when talking about bed bug control since responding to the problem is complicated and it is often difficult to tell who brought bed bugs into a building. However, it may also set the stage for finger pointing – meaning that without a clear understanding of the bed bug problem and well-defined responsibilities specific to bed bugs, the impulse to blame can escalate. This can lead to threats of withholding rent or eviction, barring access to a unit for inspection or treatment, even improper and over application of pesticides.

To get a better understanding of current laws including the rights of tenants and landlords, see SPCP's Chicago Tenants' Rights and Responsibilities fact sheet at midwestpesticideaction.org. In the fact sheet, you will find helpful suggestions, solutions and additional resources for dealing with a bed bug problem within the law.

Bed Bug Reality Check 101: Fact or Myth?

There's a lot of bad information out there about bed bugs. Let's set the record straight.

**Myth:** Bed Bugs only live in the bed.

**Fact:** Bed bugs live wherever we sleep. It doesn't matter if it's a canopyed king-sized pillow topped mattress, a couch or a sleeping bag in the corner. If a person is sleeping there the bed bugs can find you by tracking the heat you produce and the carbon dioxide (CO2) you exhale. A 'bed' to a bed bug is anywhere someone sleeps. It's not the bed they're attracted to, it's us.

**Protect Yourself: Walking into an infested room doesn't have to mean you’ll walk out with bed bugs.**

Unless an infestation is extreme, bed bugs rarely just stroll around a living space in clear sight. They are usually hidden in the cracks and crevices of a mattress, couch or other areas. Taking a few precautions when entering someone else's living space can help you protect yourself from walking out with an unwanted hitchhiker.

1. Bring in as few items as possible.
2. Store items that are necessary (files, medical supplies, etc.) in a hard covered container like a sealed plastic or metal box or carrying case.
3. Set items down away from the walls. Or, better yet, set them on a hard surfaced table away from upholstered furniture.
4. Do not sit on the bed or upholstered furniture. Choose a metal or wooden chair.
   - Interview or visit a resident in the kitchen, if possible. Kitchens and bathrooms are unlikely to have bed bugs because people don't sleep there.
5. Commit clothing to the job especially if you often enter others' living spaces.
   - Dry clothing in a hot dryer for 20 minutes as soon as you return home.
   - Use bootie shoe covers.
   - Store shoes in a sealed plastic bag until next use.
6. Always remain vigilant. Look around you while you're in the space, ask questions and make sure to inspect your own home periodically to catch a problem early.

**Upcoming Events**

The Chicago Department of Family and Support Services (DFSS) has an online bed bug awareness module currently online. If your organization receives funding or oversight from DFSS contact Jaime Hersh-White to access the module at jaime.hershwhite@cityofchicago.org.


November 9, 2011 Safer Pest Control Project Presents Beating Back Bed Bugs: Next Step. For more information go to midwestpesticideaction.org

SPCP is always looking for opportunities to hold workshops and coordinate events. Any interested organization can contact us at (773) 878-7378 ext. 207. Training can be conducted in English and Spanish.
Message from the Editor

I hate to be the bearer of bad news, but I just attended the Bed Bug Summit 2011, held right here in Chicago, and the news was not very promising. There's been a lot of new research done on bed bugs and we are learning some interesting things about them, but still there is no ‘magic bullet’ on the horizon ready to stop bed bugs in their tracks. The bottom line is we need to make better use of the tools that do work and get busy using them. This issue tells you what does work (heat) and what doesn’t work (bed bug bombs), and don’t forget to check out previous issues. Get educated! It’s the only way forward.

The Problem with Using Home Insect Foggers to Treat for Bed Bugs

They Don’t Work

According to the U.S. EPA, over 50 million total release foggers are used every year. Total release foggers (TRF), also known as “bug bombs” or “bed bug bombs”, are often used in an effort to get rid of bed bugs. In truth, bug bombs can be toxic to you and your family and don’t work well.

Why? First of all, insect foggers in stores often contain the pesticide pyrethrin or something similar. What advertisers don’t want you to know is that pyrethrins in foggers don’t work on bed bugs because bed bugs have become resistant to its effects. The ingredients in foggers also tend to repel or irritate bed bugs, forcing them deeper into the places they live - the cracks and crevices in walls, furniture, clutter, mattresses and so on. Contrary to what is commonly believed, the pesticide in bug bombs and foggers cannot get into these spaces. The bugs will simply hideout until the pesticide dries and then be back in business in a few days. And, most critically, they don’t work on bed bug eggs. A few adults may die but when the eggs hatch you are right back to square one.

They Can Cause Unnecessary Exposure to Poisons

When released, the pesticide in bug bombs will settle on everything in the room - beds, pillows, toys, kitchen counter tops, couches, tables, floors, rugs. This makes it difficult to clean up afterwards, increasing the chance that the pesticide will end up inside you, your children, or others. The ingredients in foggers can also harm people with asthma or other health conditions. Children are especially vulnerable due to their rapid growth and behaviors like crawling, playing, or putting things in the mouth.

They Can Explode

There are many documented explosions and injuries associated with the use of foggers. B.I.T.E. Back! considers bed bug bombs and other TRFs as “unsafe at any speed” and discourages their use especially for the control of bed bugs. Other methods for getting rid of bed bugs are safer and more effective. See page 2 of this issue for more information.

No one wants bed bugs but it is important to keep in mind that not every method for getting rid of them is a good one. Beware of claims that sound too good to be true – they usually are.
A Quick Guide to Pesticide-Free Bed Bug Control

There are many pesticide-free options for bed bug prevention and control. Here is a quick rundown of many of them:

✓ Do vacuum often and carefully. Vacuum beds, upholstered furniture, areas along baseboards, etc. using hose attachments and immediately dispose of the dirt and debris collected.

✓ Do get rid of clutter. It hides signs of bed bugs.

✓ Do cover mattresses and box springs with good bed bug covers.

✓ Do seal all cracks and crevices where bed bugs can live or travel through.

✓ Do inspect sleeping areas often for signs of bed bugs (stains, live bugs, eggs). Bed bugs will usually be right on the bed or within 6 to 8 feet of it.

✓ Do use heat to kill bed bugs and their eggs:
  - Use a hot clothes dryer for clothes, sheets, blankets, stuffed animals, or anything else that can go in a hot dryer.²
  - Carefully steam clean mattresses, carpet, and other furniture. Make sure the steam heats to at least 220°F.
  - Professional heat treatment can be applied to entire rooms. Rooms are usually heated to 140°F for 6 to 8 hours, depending on construction.
  - Containers can be used to heat objects such as couches, mattresses and other large items. These can be as large as a semi-trailer truck or a small box made of insulation materials with a heater attached.

DON’T bring home used furniture without carefully inspecting it first.
DON’T panic or ignore the problem. The faster you act, the easier control will be.

¹Check our B.I.T.E. Back! volumes 1, 2 and 3 for more detail on these techniques.
²Most dry clean only clothing can be put in a hot dryer as long as they are not wet.
Message from the Editor

Good news! With the dawning of the new year, we now seem to have the attention of government, private and public housing industries, and other stakeholders on the growing problem of bed bugs. Safer Pest Control Project and our partner organizations are eager to capitalize on this momentum and advance policies and laws. The goal is to stop bed bugs from wreaking further havoc in homes and communities. Already the Illinois Bed Bugs Task Force has put out a report recommending governmental actions. We will keep all our readers updated on the progress of these initiatives as 2012 moves along. In the meantime, we'll concentrate on giving more practical advice on things we all can do now – found in this issue - while we wait for progress to be made.

How to Use a Vacuum for Bed Bug Control

Vacuuming Can Really Help Knock Down the Numbers
A vacuum can be a good weapon against bed bugs. They can suck up bed bugs and their eggs during routine cleaning or as part of targeted bed bug control. And, what’s really great about using a vacuum is that almost everyone has one they can use.

How does it work? Although not 100% effective, it is a good tool for knocking down the numbers of bed bugs and makes other control methods more effective. The key is to vacuum areas where bed bugs are likely to be hiding or where nests of bed bugs and eggs are found. Focus on: 1) cracks and crevices on and around the sleeping area or bed, and 2) upholstered furniture.

How to make vacuuming work for bed bug control:
✓ Inspect around the sleeping areas and vacuum cracks and crevices. Don't forget the alarm clock, radio, or other items sitting nearby.
✓ Make the suction as strong as possible, but use gentle pressure to dislodge and suck up eggs and live bed bugs.
✓ Use vacuum attachments to get into cracks and crevices.

Precautions to take when vacuuming for bed bug control:
✓ Vacuum slowly, carefully and thoroughly for best results. Be careful not to spread bed bugs and eggs around by pushing so hard that they are “flicked” off or otherwise moved from the surface.
✓ Use a HEPA (High Efficiency Particulate Air) filtered vacuum if possible. These vacuums are available where most vacuums are sold and the filter will keep vacuumed dust from being released into the surrounding air.
✓ Make sure to empty the vacuum container or throw away the vacuum bag as soon as possible. Bed bugs and their eggs can survive the vacuuming process and crawl back out of the vacuum.
✓ Store the vacuum in a sealed plastic bag. Some bed bugs or eggs may get stuck in the suction hose and crawl back out. Careful storage is especially important if the vacuum is being used as part of a bed bug control program or you suspect bed bugs are present.
✓ Clean the outside of the vacuum between each use and cover the nozzle during transport to prevent spreading bed bugs.

Other helpful tips to maximize the impact of vacuuming:
Keep your living spaces simple and free of clutter, especially in sleeping areas. This will limit where bed bugs can hide. And, repeat vacuuming as often as possible. The more you vacuum, the more bed bugs you’re likely to suck up.

(Continued on back)
Tips for Bed Bug Control in Day Facilities and Drop-In Centers*

Bed bugs love to live where we live and as close to our sleeping areas as possible. But how do they get there? Bed bugs hitch a ride on us wherever they can. So, while they may not want to “live” in our Day Facilities and Drop In Centers because no one sleeps there overnight, these facilities can become a transfer point for bed bugs to go from one living space to another, or a “bed bug hub.” Luckily, there are steps that can be taken to prevent this from happening. First, clients can be educated, and second, the facility must be managed and maintained at a high level of order and cleanliness. Here are some good tips for reducing the chance that your facility will become a bed bug hub.

✓ Educate staff and clients on the bed bug problem: Good general information can be found at midwestpesticideaction.org or other websites. Educate on bed bug basics and then address specific steps the facility is taking to combat the problem.

✓ Manage clients’ belongings: This is one of the best ways to prevent bed bugs from being transferred from client to client or client to staff. Create a system for storing belongings (including coats) separately in sealed containers and discourage clients from bringing in unnecessary items. Use a clothes dryer on items brought in – at least 20 minutes on high heat will kill all bed bugs and eggs.

✓ Reduce clutter: Create a neat and tidy facility to eliminate bed bug hiding places. Get rid of stacks of books, magazines and newspapers especially in heavily trafficked areas.

✓ Make good furniture choices: Replace existing wood and upholstered furniture, as funding permits, with molded plastic or metal furniture which will help to eliminate as many bed bug hiding places as possible.

- In the meantime, establish thorough furniture maintenance and management programs that include furniture inspection, sealing of cracks and crevices in furnishings especially those made of wood, and regular cleaning and vacuuming of upholstered furniture. Repair or dispose of anything damaged, especially ripped or torn upholstered furniture.

✓ Make good flooring choices: Choose hard-surface flooring such as tiles, vinyl, or linoleum instead of carpeting. Choose throw rugs rather than wall-to-wall carpeting. Wall-to-wall carpeting offers many hiding place for bed bugs, especially along the baseboards. Throw rugs can be more easily inspected and removed for cleaning.

✓ Invest in the right tools for the job: Buy a HEPA filtered powerful vacuum and use the tips on page 1 of this issue of BITE Back! to help keep bed bugs in check. Buy a steam cleaner that can be used on furniture, carpeting, etc. Make sure the steam heats up to at least 220° F and has enough water capacity for your facility’s needs.

✓ Monitor for bed bugs: Frequent inspection and awareness of the facility and clients are key. There are also passive and active monitoring devices that can be placed in at-risk areas and checked during inspection to see if there has been any bed bug activity. See BITE Back! Vol. 5 for more on monitors.

Inform staff of the problem and solutions.

Bed bug eggs and fecal stains along the edge of the carpet. Photo by R. Cooper

BB Alert Passive Bed Bug Monitor: Place on furniture and check often for signs of bed bugs

*Facilities that cater to mostly adult population but do not provide sleeping facilities such as warming centers, food pantries, adult care facilities of many types.

Bed Bug Reality Check 101: Fact or Myth?
There’s a lot of bad information out there about bed bugs. Let’s set the record straight.

Myth: Walking into a bed bug infested room means you’ll walk out with bed bugs.

Fact: It’s true that bed bugs will try to hitch a ride out when they can. However, there are lots of ways to prevent this from happening. For example, avoid sitting on upholstered furniture or the bed. Bring in as few belongings as possible and keep them in a solid plastic or metal container – bed bugs can’t climb slippery surfaces well. Avoid placing belongings near the wall or on furniture. Remember bed bugs can’t jump or fly. Use these safety tips and be aware of your surroundings to avoid contact with bed bugs.

Bring things in to homes with or suspected to have bed bugs using a metal or hard plastic case.
Message from the Editor

We are all so used to seeing pesticides on the shelves of our pharmacies, grocery stores, and home improvement stores we rarely take a moment to ask exactly what’s in these products. Our instincts say that if the product is available to us right off the shelf, then it must be safe, effective, and easy to use correctly. The reality is often quite different. With the increase of bed bugs, so goes the increase in the use of all types of over-the-counter remedies. In this issue of B.I.T.E. Back! we'll discuss some of the dangers of misusing and overusing pesticides. You’ll also find some practical “how to” information you can start using right away and information on some great events in the “Upcoming Events” section.


“By their very nature, most pesticides create some risk of harm - Pesticides can cause harm to humans, animals, or the environment because they are designed to kill or otherwise adversely affect living organisms.”

– USEPA, Office of Pesticide Programs

Bed bugs continue to grow in numbers with 1 in 5 Americans finding bed bugs in their home or hotel. Do-it-yourself chemical treatments for bed bugs are common with the hope of quick, cheap control. The truth is that these critters are very difficult to get rid of, especially once an infestation has grown. In fact, bed bugs are resistant to the killing affects of most pesticides available. Resistance to pesticides is caused in part by people using them the wrong way or using the same thing over and over again.

What types of pesticides are available to YOU for bed bugs and how do they work?

Bed bugs are insects so insecticides are the type of pesticides used for control. Insecticides take many forms - liquids, aerosols and dusts - and most contain pyrethroids. Pyrethroids are a class of common manmade insecticides that are often combined with other ingredients to kill bed bugs and other insects. There are a lot of different pyrethroids with names like resmethrin, permethrin, or esfenvalerate. A pyrethroid kills by attacking the nervous system of the insect and they can be hazardous to the human nervous system, especially if not used correctly.

There are over 300 insecticide products registered with the U.S. EPA for use against bed bugs, most are available to consumers and contain pyrethroids. The EPA also makes the rules for how to label pesticides so that it’s clear how to use them.

Pyrethroids aren’t the only insecticides in bed bug products. Here are some that are commonly used:

1. **Diatomaceous Earth (DE)** is a dust made from the crushed shells of ancient creatures called diatoms. It kills by cutting the outer shell of a bed bug and causing it to die of water loss. It can, like any dust, bother the lungs and air passages of people, especially those with asthma. Use DE carefully to make sure it doesn’t get into the air.

2. **Insect Growth Regulators (IGR)** are chemicals that interfere with the growth of an organism. They are created to act on a specific insect and are unlikely to impact human health. Unfortunately, the IGR available for bed bugs don’t work very well.

(Continued on back)
3. **Neonicotinoids** are very powerful toxins that act on an animal’s nervous system. They are more effective against sucking insects than pyrethroids but bed bugs have shown resistance to their effects, too. They can cause harm to the human nervous system.

These pesticides are often mixed with pyrethroids to make them work better, but in reality none of them work well against bed bugs. In fact bed bugs are so good at resisting insecticides and breeding they are often called a “super bug.” Chemical pesticides are not a silver bullet for bed bug control.

Professional pest control operators (PCO) use basically the same pesticides as the average consumer. What makes a PCO more valuable for controlling bed bugs than the do-it-yourself approach is not access to better or stronger pesticides, it’s their experience and greater knowledge of the pest.

**Risky Business: What makes a pesticide dangerous?**

Pesticides are created to kill living things, so they are dangerous by design. Every pesticide used has a chance to cause harm to the health of people, pets, and the environment. Here are some of what determines the danger of a pesticide:

1. The type of pesticide. Some pesticides are more toxic to humans than others.
2. How much of the insecticide is in the product. Higher concentrations lead to higher risk.
3. The chance of the product getting inside places it doesn't belong such as kids, pets and our drinking water. For example, aerosol sprays and foggers are riskier to use because they are more likely than liquids and dusts to end up in places we don’t want them.

We do not know the true health risk of any pesticide product. There are thousands of different formulations and we don't know enough about the combined effects of all the ingredients on human health. Since insecticides in stores don't work well on bed bugs and are toxic by design, B.I.T.E. Back! recommends using integrated pest management (IPM) to control bed bugs instead of solely relying on an insecticide. Check out our back issues of B.I.T.E. Back! for more information on bed bugs and IPM at www.midwestpesticideaction.org

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**Upcoming Events**

Safer Pest Control Project is scheduling FREE Bed Bugs in Chicago: What Every Client Service Organization and Building Manager Needs to Know seminars around Chicago

**June 6, Garfield Park at the Garfield Park Conservatory**

300 N. Central Park from 9:30 am to noon.

More to be scheduled. Check our website often.
Go to midwestpesticideaction.org for more information and to register.
The training is free but you must register to attend.

**Other Bed Bug Events:** EPA Region 2, Bed Bugs Go to School Webinar on June 18th, noon to 1:30 pm. Sign up for this free webinar at www1.gotomeeting.com/register/325309409.

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**INSECTICIDES AND BED BUGS**

**Leave It to the Professional.**

Pesticides are poisons and B.I.T.E. Back! believes only professionals should apply pesticides. Heat and other non-chemical control methods should always be the first choice. Here are some basic practices and precautions any good professional pest control operator (PCO) should take:

1. **Your PCO should never promote insecticides as a silver bullet.** Any good bed bug control effort will need to include the following:
   a. Proper education of residents, clients, staff, and management
   b. Thorough inspection
   c. Preparation of treated space that will depend on many factors
   d. Non-chemical treatments such as vacuuming, steam cleaning, laundering, etc
   e. Re-inspection
   f. Re-application

2. **Your PCO should avoid the use of insecticides around children and other sensitive individuals.** Children are more vulnerable to toxins, including pesticides, because they are still growing and developing. It's best to eliminate, or severely limit, pesticide use around children.

3. **Your PCO should only use aerosols and liquid insecticides in cracks and crevices** because that’s where the bed bugs live. They work best when they make direct contact with a live bed bug while wet. **They DO NOT kill bed bug eggs** and they lose their killing power quickly when dry.

4. **Your PCO should only use dusts in cracks and crevices.** They are most effective when dusting is done lightly so that the bed bug doesn’t avoid the dust. **They DO NOT kill bed bug eggs.**

5. **Your PCO knows that more does not mean better control.** A small amount used in a very targeted way will often give better control.

6. **Your PCO will discuss reapplication as necessary.** Because no insecticide works against bed bug eggs, no matter how carefully a pesticide is applied, it will have to be reapplied about two weeks later to kill any newly hatched bed bugs. If this is not done, the cycle of infestation will start all over again.

7. **Your PCO will only use products as labeled.** Using a pesticide in a different way, or on a different pest, than labeled is illegal and your PCO can be prosecuted and fined for doing so.
A NEW Tool for Fighting Bed Bugs: Neem Oil Offers a ‘Natural’ Alternative

Neem oil, a naturally occurring organic oil derived from the neem tree (*Azadirachta Indica*), has been found to kill insects, and according to the U.S. Environmental Protection Agency, it has been shown to help control bed bugs! It is already used in many cosmetics, including shampoos, make-up, soap, toothpaste, and hand creams, as well as traditional medicines. This is good news since there are so few products that have been proven to work against bed bugs.

**How does it work?**

1. It discourages bed bugs from feeding.
2. It causes bed bugs to stop growing and eventually to die.
3. It forms a coating on insects’ bodies causing them to die from suffocation.
4. It helps reduce the number of eggs bed bugs lay by blocking their ability to mate successfully.

Unfortunately, neem oil doesn’t kill bed bug eggs. It must be reapplied every few weeks to kill newly hatched bed bugs until the problem is controlled.

To treat for bed bugs, neem oil must be sprayed into cracks and crevices – along baseboards, around electrical outlets and window frames or wherever bed bugs are found. It can be sprayed lightly on mattresses, box springs, and headboards to repel bed bugs. However, the repellent effects will only last a few weeks. Like most living things, bed bugs eventually get used to it.

Neem oil has been categorized as having the lowest toxicity rating for human health effects (Toxicity Tier IV). This means it’s relatively non-toxic to humans. As a naturally occurring insecticide, neem oil has been shown to pose little threat to fish, birds, or fetuses, does not contaminate water, and does not harm non-target organisms. In May 2012 the EPA registered two new pesticide products containing neem oil, TER-TRU1 and TER-CXI. TER-TRU1 is a ‘ready-to-use’ product for residential and commercial use. TER-CXI is only for commercial use and is a concentrated formula.

Like all pesticides, neem oil must come into direct contact with bed bugs to cause death. There’s no substitute for awareness, good inspection, and follow-up for preventing or fighting an infestation. Hopefully neem oil proves to be a valuable addition to the bed bug control toolbox.
Fogger Update: Scientifically Proven to Not Work!

*B.I.T.E. Back!* featured a short article on home insect fogger/bombs in our Fall 2011 issue (Volume 7), in it we gave some examples of why foggers don't work. Until recently, no scientific studies had been done to support these general observations. Thanks to a study, released this June, from Ohio State University, Department of Entomology, that’s changed. Their study showed that buying bed bug foggers is a waste of money and time.

The study tested four popular brands of bug bombs in real world situations. Three of the bombs were labeled for all ‘flying and crawling insects’ and the fourth was labeled specifically for controlling bed bugs. All foggers claimed to 'kill on contact', yet the bed bugs were unaffected by the content in the bombs even when it was applied directly to the bugs.

None of the products killed enough bed bugs to be considered effective. Coupled with the Centers for Disease Control and Prevention’s (CDC) 2008 ruling that foggers are dangerous to human health, the Ohio State findings supports the best practices advice that foggers not be used to fight bed bugs. Don't waste your money.

**Bed Bug Reality Check 101: The Facts**

**Fact:** Sealing and bagging up clothing, bedding, stuffed animals, and other items are not recommended to kill bed bugs. Bed bugs have been known to live up to a year on one meal. Storing clothes and other belongings in sealed containers may keep them safe from becoming infested or prevent the spread of an infestation. However, to get rid of the bed bugs on your stuff, other treatments are needed. See previous issues of *B.I.T.E. Back!* for options (http://www.spcpweb.org/factsheets/BITEBack!newlettersVol.1-8.pdf).

**Upcoming Events**

FREE Bed Bugs in Chicago: What Every Client Service Organization and Building Manager Needs to Know

**September 12th:** Vodak-East Side Library, 3710 E. 106th St., Chicago 1:00 to 3:30 pm

**October 10th:** Blackstone Library, 4904 S. Lake Park Ave., Chicago 1:00 to 3:30 pm

Go to midwestpesticideaction.org for more information and to register. The training is free but you must register to attend.

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*Midwest Pesticide Action Center is dedicated to reducing the health risks and environmental impacts of pesticides and promoting safer alternatives.*

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Midwest Pesticide Action Center is funded in part with a grant from the City of Chicago Department of Housing and Economic Development.
Message from the Editor

It’s no secret that bed bugs are a particularly difficult pest to control and have been a growing concern in the City of Chicago over the past four years. Bed bugs are excellent at hiding and can survive long periods of time between feedings. Unfortunately, many treatments on the market are simply not effective. Many “miracle products” are touted as quick and affordable fixes. Chicago citizens should be skeptical of these so-called easy solutions. If you have bed bugs, it’s important not to panic and throw out bedclothes, rugs, and other items that can be preserved with proper treatment. It’s also important not to waste money on solutions and service providers that promise too much. In this issue, we’ll discuss how the Federal Trade Commission (FTC) is challenging false claims and examine a recent announcement that named Chicago as the #1 city for bed bugs.

Buyer Beware: Federal Trade Commission Cracks Down on False Claims

The FTC is bringing a lawsuit against RMB Group, LLC, manufacturers of Rest Easy Bug Spray, for over-hyping their products and making false claims about their effectiveness against bed bugs and lice. The spray was sold in retail chains like Walgreens and Bed Bath & Beyond and claimed to naturally repel bed bugs and that the consumer could create a barrier by spraying it around their bed.

Their products contain cedar, cinnamon, lemon grass, peppermint, and clove oils, which are all natural products, but they do not prevent or eliminate bed bugs. The only prevention tactic for bed bugs is to be aware that you may bring them home and to adjust your behavior accordingly. The FTC said there is not enough evidence that supports their claim that cedar oil kills bed bugs. The maker of Rest Easy settled for $264,976.

It may seem tempting to purchase products that claim to eradicate bed bugs naturally instead of turning to a professional pest control company or more traditional solutions, but you must be skeptical and look for the facts. Otherwise you risk wasting your money and not alleviating the problem.

Safer Pest Control Project wants you to be aware of the false claims that some companies may make in order to sell their products. Ineffective products can waste your time, money, and effort. As seen with bed bug foggers, they can even make your infestation worse and more difficult to treat. The FTC recommends that you check with a local pest control specialist before using any products that purport to eliminate bed bugs.

Check out BITE Back! Vol. 5 and all of our other helpful information at www.midwestpesticideaction.org
Is Chicago Really #1?

After seeing a 33% increase in business over 2011, pest control company Orkin recently ranked Chicago as #1 in requests for bed bug treatment services in 2012. Chicago moved up from its #2 spot the year before, knocking Cincinnati from the top spot. The entomologist and technical services director for Orkin, Ron Harrison, Ph.D., sees the continuing growth in new requests for bed bug services as direct evidence that bed bugs continue to be a problem throughout the U.S.

Alarming as this may sound, it is important to look closely at the data to understand what this report really means. While bed bugs do continue to be a problem in the U.S., this announcement is based off of the service requests of just one company, Orkin. It is not a comprehensive study of total bed bug occurrences and does not include requests of other pest control companies. Other possible explanations for the increase in Orkin services may include Chicago residents switching over to Orkin, clients in other cities who previously used Orkin to switch to another company, or a particularly affective marketing campaign in Chicago. While Chicago is at the top of this particular list, it means little without more comprehensive data on the full scope of the bed bug problem.

Where do Pest Control Operators Find Bed Bugs?

This chart provides relative percentages of where pest control operators routinely find bed bugs.

Where do bed bugs hide?

- Mattress: 22.4%
- Boxspring: 34.6%
- Couch & Chair: 22.6%
- Frame & Headboard: 13.4%
- Walls & Ceiling: 2.3%
- Baseboard Areas: 1.4%
- Other: 3.1%
- Dresser: 0.2%

Source: University of Kentucky study of infested apartments

City of Chicago Moves Toward a Comprehensive Bed Bug Ordinance.

Earlier this year, three aldermen, Ray Suarez (31st Ward), Harry Osterman (48th Ward), and Debra Silverstein (50th Ward) held a joint hearing to discuss a bed bug ordinance that will be introduced to the Chicago City Council this spring. We support the passage of the ordinance. It is paramount that the city tackles this issue at an institutional level with a comprehensive, collaborative, and well-funded plan. Safer Pest Control Project has played a key role in providing technical assistance to develop this ordinance. We will be posting any updates to the ordinance’s progress on our Facebook account.

Check out an editorial on the ordinance that appeared in the Chicago Tribune earlier this year here.

Upcoming events:

Two new dates:
free regional bed bug trainings
Registration is available at
www.midwestpesticideaction.org

April 30th: Rogers Park Library
6907 N Clark St, Chicago
1:30 p.m. to 3:00 p.m.

June 5th: Garfield Park Conservatory
Jensen Room
300 N. Central Park Ave, Chicago
1:30 p.m. to 3:00 p.m.

Go to midwestpesticideaction.org to download bed bug factsheets and other useful information.

Midwest Pesticide Action Center is dedicated to reducing the health risks and environmental impacts of pesticides and promoting safer alternatives.

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Midwest Pesticide Action Center is funded in part with a grant from the City of Chicago Department of Housing and Economic Development.