

**REPORT**  
Of The  
**ILLINOIS STRUCTURAL PEST CONTROL ADVISORY COUNCIL**  
**SUBCOMMITTEE ON BED BUGS**

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The new millennium brought many things. One such was the epidemic of bed bugs (*Cimex lectularius*) currently plaguing much of the United States. At present there seems no end to the spread of these blood-sucking parasites and to the suffering and financial burden they cause. At this time, bed bugs are not known to transmit disease to humans. Yet they are considered a threat to human health because bed bugs affect people psychologically and emotionally, as well as physically, causing stress and loss of sleep which, in turn, render the afflicted more susceptible to disease (CDC 2010).

It will take a concerted and dedicated effort from disparate agencies, groups and individuals, to reduce the current level of bed bug infestation to what it was a decade ago when bed bugs were virtually unheard of. Ten years ago entomologists and pest management professionals were more likely to receive complaints concerning bat bugs (*Cimex* species that feed on bat blood) rather than bed bugs. Today, bat bug encounters remain uncommon, but human encounters with the closely related bed bug have become commonplace. New York City has been tracking bed bugs since 2004, and the City's massive increase in infestation showed in a survey (NYC 2009) that found 1 in 15 residents of New York City had had a problem with bed bugs in their homes. Similarly, bed bug complaints increased from 537 in 2004 to 12,768 in 2010 (NYC 2010). The largest pest management companies in the United States recently estimated the extent of bed bug infestation in larger cities. Their rankings showed Chicago as the third-most bed bug infested city in America (PRNewswire 2011, Orkin 2011). A recent nationwide survey found that 1 in 5 Americans have had bed bugs in their home or know someone who has encountered bed bugs at home or in a hotel (Henricksen 2011).

The Illinois Department of Public Health (IDPH) in Springfield receives an average of 50 inquiries per month on pest-related issues from citizens, health care workers, local health department staff and others. Prior to 2007, bed bug inquiries to the Department were virtually nonexistent. As of 2011, bed bug inquiries make up approximately 30 percent of the Department's pest-related inquiries, and the number appears to be trending higher (C. Colwell, pers. comm.).

Bed bugs are not new to North America. Prior to the 1960s, bed bugs were a major pest in the United States, ranked even above the German cockroach (*Blattella germanica*) as a household pest of concern. The use and perhaps overuse of DDT and other pesticides marketed in the 1940s and thereafter appears to be the reason bed bugs were rarely seen in the United States in recent decades (Potter 2011).

Prior to the bed bug resurgence, the pest control industry, public health and other agencies, had all but forgotten bed bugs. As bed bugs began to thrive and spread across the country, the pest control industry was just beginning to mobilize against this "new" pest. The average citizen perhaps believed bed bugs existed only in nursery rhymes. A lack of public awareness has left most people unprepared to recognize the signs of infestation, allowing bed bugs to reproduce, disperse, and become more difficult and expensive to manage.

The public's lack of awareness provides for the continuing spread of bed bugs through seemingly innocuous behaviors. The procurement of typically infested items such as mattresses, box springs, bed frames, nightstands, couches and recliners from yard/garage sales and streets where such items are left for discard, continues to infest unsuspecting households with bed bugs. Similar contributors to the bug's spread include commerce in secondhand and rental furniture, as well as bed bug contaminated delivery vehicles and public transportation.

This report was mandated by an Amendment (225 ILCS 235/10.15) to the Illinois Structural Pest Control Act, requiring the Structural Pest Control Advisory Council form a subcommittee "...to study the increase in bed bug infestations and make...recommendations on the prevention, management, and control of bed bug infestations."

As we write this report, those of us who have become aware of the bed bug's prevalence and proclivity for hitchhiking into our homes are taking precautions in apartment buildings, hotels, theatres, libraries, dormitories, shelters, group homes, senior housing – even in health care facilities, schools and offices. But much more needs to be done. The Subcommittee's carefully considered recommendations represent the final product of many hours of working to arrive at the best possible solutions to lift this tremendous weight, and ultimately to reduce the increasing financial, temporal, medical and emotional burden that bed bugs now impose upon the people of Illinois. We have listened to testimonies of representatives from various stakeholders including the Chicagoland Apartment Association, Illinois Rental Property Owners Association, Illinois Hotel and Lodging Association, Illinois Association of Realtors, the furniture rental industry, and the United States Environmental Protection Agency. The Subcommittee has also considered the recommendations of bed bug committees and bed bug legislation enacted in other states and municipalities, including those of New Jersey, Pennsylvania, Maine, Arizona, and New York City. What follows is the product of our investigations.

## **PUBLIC AWARENESS AND EDUCATION**

Public awareness, early detection of bed bugs, and integrated pest management (as defined in 225 ILCS 235/3.25) are of paramount importance in making and keeping structures free of infestation. Perhaps the majority of citizens first become aware of bed bugs via media reports that often highlight the bug's insidious nature and blood-sucking behavior, or lawsuits sparked by bed bug activity, more than practical information on bed bug recognition, prevention and control. Persons exposed to bed bugs often look to the Internet or rely on pest management professionals for bed bug information. A 2010 survey found that more than one-third of respondents said they would attempt to treat a bed bug infestation themselves before calling a pest management professional (Henricksen 2011). While professional pest management is recommended, it is not initially utilized by some, and it remains unaffordable for many others who are thus resigned to do-it-yourself pest control or none at all. They may resort to over-the-counter pesticides, many of which are ineffective against bed bugs, despite "bed bugs" being listed on the product labels. Frequently these products, e.g., many total-release aerosol products ("bug bombs" or "foggers") are misapplied in ways detrimental to bed bug control, and hazardous to those who misuse them. In households unable to afford professional pest control, bed bugs will inevitably reproduce and spread to other households.

Everyone is at risk. A campaign to increase public awareness of bed bugs is necessary to provide people with the means to prevent, recognize and manage bed bug infestation. We believe the Illinois Department of Public Health should take the lead in educating the public with regard to bed bugs. But at present, resources are a limiting factor.

## **RESPONSIBILITY FOR BED BUG MANAGEMENT IN RENTED DWELLINGS**

Bed bugs have re-emerged at an alarming rate as a pest management problem in multi-unit rental dwellings, with damaging consequences for building owners and management agents (herein, collectively "landlords") as well as tenants. Landlords frequently expend thousands of dollars to treat and manage bed bugs, particularly in multi-unit dwellings. At the very least, tenants suffer emotional distress and often unnecessarily replace furniture, clothing, and other infested items. While landlords are ultimately responsible for coordinating and contracting for bed bug control in these dwellings, both landlords and tenants have important roles and responsibilities in preventing, detecting and managing bed bug infestations.

The Illinois Department of Public Health receives more bed bug calls from tenants reporting the failure of landlords to treat or control bed bugs than any other type of pest-related inquiry. The following reasons are frequently cited: 1) the landlord claims the tenant brought bed bugs into the building, and therefore the bugs are the tenant's responsibility, and 2) the landlord is doing in-house pest control or has employed a pest control service, but thus far control has been inadequate. Complaints such as these highlight the need for communication, coordination, and cooperation between landlords and tenants if bed bug management is to succeed.

After considering testimony and information from landlords, landlord organizations, tenant advocates, pest management professionals and other concerned parties, the Subcommittee has established the following premises for promoting effective bed bug management in multi-unit rental dwellings.

*1) Effective education to improve public awareness, as well as open communication between landlords and tenants, are critical to the prevention, early detection and management of bed bugs in multi-unit rental dwellings.*

The lack of effective education and public awareness results in the spread of bed bugs in multi-unit rental dwellings for a number of reasons. Landlords and tenants may not understand the many sources of bed bug infestation in multi-unit rental dwellings that can lead to infestation. Many do not know how to prevent infestations or detect early signs of infestation, allowing bed bugs to spread from one unit to many.

Poor public awareness and the use of outdated or inaccurate information about bed bugs and their control sometimes prompt landlords and tenants to employ ineffective treatment methods that can delay control and cause excessive exposures to pesticides. Tenants, because they may fear retribution including eviction, also contribute to delays in control by failing to promptly notify landlords after discovering bed bugs in their units.

Such delays in detection and effective treatment allow bed bugs to reproduce and disperse into evermore units, ultimately and significantly increasing the landlord's cost of management as well as the expense, anguish, and negative health impacts experienced by tenants.

Therefore, it is the consensus of the Subcommittee that:

- 1) The Illinois Department of Public Health should be funded to produce an informational bed bug pamphlet containing the following information with regard to bed bug infestation: 1) Identification, biology and signs of activity, including photographs or illustrations of bed bugs, 2) prevention and control, e.g., what tenants should and should not do to prevent infestation and manage bed bugs, 3) When and how to properly discard infested items, 4) Tenant responsibilities (e.g., notifying landlords of infestation, preparing units for treatment, allowing access for inspection and treatment), 5) Landlord responsibilities (e.g., coordinating and contracting pest management services), 6) The statement such as: "As a tenant, you cannot be punished (evicted, made to forfeit security deposit, etc.) for reporting the presence of bed bugs in your building to the landlord/manager," and 7) A list of additional bed bug resources. Once prepared, the pamphlet will be subject to a non-binding 60-day public comment period before distribution. Once the IDPH pamphlet is published, landlords must ensure it is provided to all new tenants and to existing tenants at the time of lease renewal.
- 2) Landlords should adopt an Integrated Pest Management (IPM) Plan for prevention and control of bed bugs. The plan should include efforts to raise awareness of building staff and tenants with regard to bed bug prevention and early detection.

*2) Landlords, tenants, and pest management professionals (PMPs) all have important roles and responsibilities in effective bed bug management in multi-unit rental dwellings.*

It is the landlord's responsibility to coordinate and contract bed bug control in multi-unit rental dwellings. Landlords are better able to disseminate information to tenants, gain access to all units, and to secure and coordinate pest control services. But landlords cannot do this without cooperation from tenants and PMP's. All have shared responsibility and should share accountability. It is our intention to define those responsibilities and to foster communication and cooperation between landlords, tenants and PMPs.

Bed bug management in multi-unit rental dwellings is complicated by the bed bug's tendency to spread, the need for timely and coordinated treatment of multiple units, and the potentially high cost of effective treatment. Landlords, tenants, and PMPs all have significant roles to play, and if not played properly, bed bug management will likely fail.

To facilitate early detection, tenants and building staff should make the landlord aware of infestations as soon as they are suspected. Within a reasonable timeframe after learning of a possible infestation, landlords should inform tenants of the need to access their units for inspection and treatment. To facilitate inspection and treatment, clear instructions must be provided to tenants to prepare their units in a manner consistent with recognized standards (e.g., NPMA 2011). Landlords and PMP's should instruct tenants to reduce clutter, and launder clothing and bedding. The cooperation of tenants is necessary to minimize disruption to their households, limit the likelihood of additional treatments, and reduce the potential for bed bugs dispersal to other units. Pest management professionals should also provide complete information about the treatments they apply. Public health officials should be empowered and funded to hold landlords, tenants and PMP's accountable for their respective roles in bed bug management.

Therefore, it is the consensus of the Subcommittee that:

- 1) Landlords are responsible for managing bed bugs in all units and common areas of the rented dwellings. Within 5 business days of a tenant's written notice that the tenant's unit may be infested, landlords must have the unit inspected, per lease terms, by a licensed pest control professional or capable person with sufficient knowledge of bed bugs. If the inspector discovers evidence of bed bug activity, within 5 business days of the inspection the landlord must contract with a licensed professional pest management company or certified non-commercial technician, i.e., one who is at least minimally certified, to apply treatment in compliance with the principles of Integrated Pest Management as outlined in the Illinois Structural Pest Control Act and Code (225 ILCS 235/3.25) and accepted guidelines (see NPMA, 2011) for bed bug management. The landlord should notify tenants that additional inspection and treatment may be necessary and may occur over several weeks.
- 2) Landlords must not rent units known to be infested with bed bugs, until a licensed pest management professional or certified non-commercial technician has applied treatment in compliance with the principles of Integrated Pest Management as outlined in the Illinois Structural Pest Control Act and Code (225 ILCS 235/3.25) and accepted guidelines (see NPMA, 2011) for bed bug management. Landlords must disclose to prospective renters whether bed bugs have been found in a unit, and if the unit has been treated for bed bugs within the last 60 days.

- 3) A tenant who has received the IDPH bed bug pamphlet, and who is deemed mentally and physically capable, is responsible for promptly informing the landlord if they discover signs of bed bug activity (see IDPH 2011) in their unit. This notification should be in written form.
- 4) Tenants must grant access to their units for purposes of pest inspection and treatment following notice of intent to do so from the landlord. Upon notification, tenants must follow recommendations with regard to the preparation of units for treatment, and shall complete preparation within 5 business days.
- 5) Tenants that knowingly do not provide prompt notification, access and preparation as specified by their landlord, may be subject to monetary fines levied by the local health department after investigation by the department.
- 6) Upon request, the pest management professional or pesticide applicator must provide the landlord and/or tenant with current labeling and Material Safety Data Sheets (MSDS) of all pesticides to be applied in the unit.
- 7) Similarly, it is recommended that condominium associations' by-laws specify that condominium owners contract with a single pest management company to ensure the necessary coordination and continuity of bed bug treatment, rather than allow owners to contract with different companies.

*3) Landlords and tenants of single-unit, detached rental properties shall be exempted from compliance with the above recommendations of this section.*

The complicated nature of bed bug management in multi-unit rental dwellings does not easily translate to the single-family detached rental dwelling. Landlords of these structures may be small proprietors and tenants may take a larger role in the upkeep and maintenance of the rental property.

## **ILLINOIS SAFE AND HYGIENIC BED ACT**

Effective July 16, 1999, the Illinois Safe and Hygienic Bed Act (410 ILCS 68), *in brief*, requires the following:

- 1) All bedding (defined as any mattress, box spring, foundation, or studio couch made in whole or part from new or secondhand fabric, filling material, or other textile product or material and which can be used for sleeping or reclining purposes) shall be labeled as new or used.
- 2) All manufacturers and refurbishers whose bedding products may be sold within the State shall register with the IDPH on or before January 1 of each year and shall pay a registration fee.
- 3) Every manufacturer and refurbisher shall inspect new and used bedding items for soiling, malodor, and pest infestation prior to sale or distribution. If any appears soiled, malodorous, or infested, that material or component cannot be reused, sold, or distributed.
- 4) The IDPH shall promulgate administrative rules necessary to implement, interpret, and make specific the provisions of this Act, including but not limited to rules concerning labels, registration, sanitation, and fees.
- 5) Any person who violates any provision of this Act or the rules promulgated under this Act shall be guilty of a business offense punishable by a fine of \$10,000 and shall be guilty of committing an unlawful act or practice pursuant to Section 2 of the Consumer Fraud and Deceptive Business Practices Act.

To date, the provisions of the Safe and Hygienic Bed Act have not been enforced – the Act has been an “unfunded mandate.” The IDPH has not been assigned funding that would enable the Department to enforce the various provisions of the Act.

The Subcommittee believes the Act, if enforced, would be a valuable check on the spread of bed bugs in Illinois. Bed bugs typically infest structures by “hitchhiking” on items. These can include personal items, (e.g., clothing, luggage, backpacks and purses) as well as items obtained from garage sales, flea markets, auctions, new and used furniture dealers, private sales, and discarded “street” goods. Bed bugs are also found in delivery vehicles and warehouses, and can infest households when new mattresses are delivered and old mattresses (that may be infested) picked up by the same vehicle. Enforcement of the above Act would be of value in protecting consumers from bed bugs by helping them recognize items as new or used, and by helping to ensure the bedding items they purchase are free of bed bugs. However, the Subcommittee recommends additional provisions be added to strengthen the Act’s capacity to protect consumers, property owners and others. has also concluded that, with certain added provisions, the Act’s capacity to protect consumers, property owners and others.

Therefore, it is the consensus of the Subcommittee that:

- 1) The Illinois Safe and Hygienic Bed Act should be amended to include requirements for the proper disposal of bed bug-infested bedding items including mattresses, box springs, bed frames, couches, sofas, reclining chairs and other furniture in which persons commonly sleep.
- 2) The Act should be amended to include businesses that sell and rent used bedding and furniture of the type mentioned above. Appropriate bed bug information should be distributed to patrons in these establishments. Before being rented or sold, used items must be inspected and made free of pests including bed bugs. No new or used furniture of the type mentioned above shall be sold, distributed, or stored if infested with bed bugs. Similarly, no delivery vehicle shall be used while it is infested with bed bugs. Any item that cannot be made free of bed bugs and other pests shall be promptly removed from the premises and disposed of by incineration performed by a licensed waste management company or deposited in a landfill after being damaged to render it unusable, wrapped and sealed (e.g., in plastic sheeting), and marked in such a manner as cannot be overlooked with the words “BED BUG INFESTED.”
- 3) The Illinois Department of Public Health shall be initially funded to enforce the Act. It is recommended that a tax be levied on the sale of new and used mattresses and box springs, to be used in addition to registrant fees to provide ongoing funding for enforcement of the Act. Tax income in excess of that necessary to fund the enforcement program shall be used to subsidize the distribution of mattress/box spring encasements and/or bed bug traps to low and no-income residents of Illinois.
- 4) To further prevent the spread of bed bugs, it is suggested that the mattress and waste management industries collaborate with the IDPH to further strengthen the Act.

## **RESPONSIBILITY FOR BED BUG MANAGEMENT IN LODGING FACILITIES**

In Illinois, lodging facilities such as hotels, motels, and bed-and-breakfast establishments are regulated to some degree by both their respective municipal authorities and local health departments. In addition to applicable local ordinances (which in general do not specifically reference bed bugs), any incorporated

(within city limits) lodging facility falls under the jurisdiction of its municipality by virtue of the Illinois Nuisance Statute (720 ILCS 5/47-5). Though it may not be directly applicable to bed bug infestation, the Nuisance Statute has been interpreted as giving municipalities the authority to inspect and attempt to resolve bed bug complaints and issues, for example, in hotels. However, due to the ambiguity and general lack of regulation, and because code enforcement personnel of most municipalities have not been trained or budgeted to respond to bed bug issues, Illinois municipalities have largely been reluctant to act to resolve bed bug problems in lodging facilities.

For similar reasons, local health departments often do not investigate bed bug issues in lodging facilities. Though their jurisdiction encompasses lodging facilities' food-handling and swimming pool safety, county health departments have "nuisance" jurisdiction only in unincorporated areas, whereas most lodging facilities reside in incorporated areas.

Unlike other Illinois municipalities, the City of Chicago has in place the necessary language giving the Chicago Department of Public Health the authority to inspect Chicago lodging facilities for purposes of resolving bed bug issues and to levy fines when establishments do not comply (see Municipal Code of Chicago, 5-12-010-200). The Subcommittee believes that the majority of Illinois lodging establishments are well-prepared to manage bed bugs, having established protocols to deal swiftly and adequately with infestations, and that most do not require additional incentives to do so. However, the Subcommittee also feels that a statute similar to that enforced by the City of Chicago should be written to give all certified health departments in Illinois this same authority, and thereby reduce any ambiguity that might result from the separate promulgation of bed bug statutes by municipalities.

Therefore, it is the consensus of the Subcommittee that:

- 1) Certified local health departments should be given regulatory enforcement authority to respond to complaints of bed bugs in lodging establishments, and to respond whenever health department personnel have reasonable suspicion that bed bugs are present.
- 2) Hotel personnel must grant access to health department inspectors who declare they are investigating a possible bed bug infestation therein, and should comply with remedial actions suggested by the inspectors. Remedial actions that may be enforced by health departments include: 1) retaining a licensed pest management company to manage bed bug infestations, 2) ensuring that hotel staff recognize signs of bed bug activity and react appropriately, 3) attending educational seminars on bed bugs and their control, and 4) fines for noncompliance.
- 3) The Illinois Department of Public Health must ensure that the appropriate local health department personnel receive adequate training in bed bug identification, behavior, prevention and control, and sufficient funds must be allocated to the IDPH to provide this training.
- 4) Hotel personnel should not be permitted to assign guests to rooms suspected by hotel personnel to be bed bug-infested.
- 5) Municipalities may also respond to suspected bed bug infestations in hotels. To facilitate this, bed bugs shall be ranked with other structure-infesting pests, such as rodents and cockroaches, for purposes of investigating complaints and suspected infestations pertinent to nuisance statutes and local ordinances regarding structural pests.

## **FUNDING**

The current bed bug epidemic has been cited as urgent and escalating – a public health and social justice problem to which public health departments should respond with authority (Eddy & Jones 2011). The Illinois Department of Public Health and local certified health departments across Illinois are in a unique position to serve the public by acting as clearinghouses for bed bug information and by providing informational support to those with bed bug problems. Our health departments currently provide solutions to problems with other types of pests. However, the volume of bed bug inquiries to health departments, and especially the training and funding necessary to provide such expertise, is largely lacking.

The consequence of resolving a significant volume of bed bug issues would burden many health departments lacking the necessary funding and training to help their clientele with bed bug problems. This leaves the public without the resources necessary to resolve bed bug problems and, in the bigger picture, facilitates the movement of bed bugs to other structures and households.

Therefore, it is the consensus of the Subcommittee that:

- 1) The Illinois Department of Public Health shall be adequately funded to assume primary responsibility for: 1) Providing bed bug training to certified local health department and municipality personnel, and 2) Preparing, making available on the Internet, printing and distributing multilingual information including a pamphlet that landlords shall provide to all new and lease-renewing tenants.
- 2) All Illinois certified local health departments shall be adequately funded to conduct bed bug inspections of lodging establishments as well as investigations of tenants who allegedly fail to notify their landlords of bed bug infestation in their units.
- 3) The IDPH shall be sufficiently funded to establish the mattress and bedding manufacturer registration program and other Department obligations as specified in the Illinois Safe & Hygienic Bed Act.
- 4) The State can obtain bulk purchase pricing from manufacturers of mattress/box spring encasements and bed bug monitors (traps) approved by the IDPH. It is suggested that such purchases be funded so that these products can be distributed to low and no-income residents by non-profit or charitable organizations, using criteria for qualification that are approved by the IDPH and State of Illinois.

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