

Illinois Structural Pest Control Advisory Council

Subcommittee on Bed Bugs

2011



ILLINOIS STRUCTURAL PEST CONTROL ADVISORY COUNCIL SUBCOMMITTEE ON BED BUGS

October 14, 2011

Curt Colwell, Ph.D., Illinois Department of Public Health Susan DiGrino, McDonough County Health Department Chris Haggerty, American Pest Control Inc.

Tony Hernandez, Illinois Housing Development Authority Meron Kahssai, Metropolitan Tenants Organization Gary Pietrucha, Envirosafe Pest Management Inc.

Judith Roettig, Chicagoland Apartment Association Rachel Rosenberg, Safer Pest Control Project

Nancy Tikalsky, J.D., Office of the Illinois Attorney General

The Structural Pest Control Act was amended in 2010 (Public Act 096-1330) to require the Structural Pest Advisory Council to convene a subcommittee to develop a report to the General Assembly with recommendations on the prevention, management and control of bed bug infestations. The report is to include recommendations related to the availability of education materials on bed bug prevention, management and control; proper transport, storage and disposal of bed bug infested materials; promotion of the development of effective bed bug treatment methods or options to eradicate bed bug infestations; and increased knowledge and awareness among tenants, landlords, property managers and owners about preventing bed bug infestations.

The advisory council formed a subcommittee to consider the increase in bed bug infestations and make recommendations for addressing this growing public nuisance. The following is the subcommittee's report.

Bed bugs (*Cimex lectularius*) are small, flat, parasitic insects that feed solely on the blood of people and animals while they sleep. Bed bugs are reddish-brown in color, wingless and live for several months without a blood meal. Bed bugs are found around the world, but traditionally had been a problem in developing counties. Recently, however, bed bugs have been spreading swiftly in the United States and in Illinois. Bed bugs are not known to transmit disease to humans, but can be an annoyance because they may cause itching and loss of sleep. Bed bugs are considered a human health threat because they affect people psychologically and emotionally, as well as physically, causing stress and loss of sleep that can render the afflicted more susceptible to disease.¹

It will take a concerted and dedicated effort from disparate agencies, groups and individuals, to reduce the current level of bed bug infestation. New York City, which has been tracking bed bugs since 2004, has seen a significant increase in infestations. A 2009 survey found one in 15 residents of New York City reported a problem with bed bugs in their homes. Similarly, bed bug complaints increased from 537 in 2004 to 12,768 in 2010. The largest pest management companies in the United States recently estimated the extent of bed bug infestation in larger cities and listed Chicago as the third-most bed bug infested city in America. A recent nationwide survey found one in 5 Americans have had bed bugs in their home or know someone who has encountered bed bugs at home or in a hotel.

The Illinois Department of Public Health (Department) 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. In 2011, bed bug inquiries make up approximately 30 percent of the Department's pest-related inquiries.

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 (*Blatella germanica*) as a household pest of concern. With improvements in hygiene and the widespread use of DDT (dichlorodiphenyltrichloroethane) and other pesticides in the 1940s and 1950s, bed bugs were rarely seen until the recent decade. ¹²

Before the recent bed bug resurgence, the pest control industry, public health and other agencies, had all but forgotten bed bugs. But as bed bugs began to thrive and spread across the country, the pest control industry mobilized against this pest. Most people, however, were 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 a means for the spread of bed bugs through seemingly innocuous behaviors. The procurement of items, such as mattresses, box springs, bed frames, nightstands, couches and recliners that were discarded or purchased from yard and garage sales can spread bed bugs to

households. Other contributors to spread of bed bugs are commerce in secondhand and rental furniture, contaminated delivery vehicles and public transportation.

Precautions are taking place in apartment buildings, hotels, theaters, libraries, dormitories, shelters, group homes, senior housing, health care facilities, schools and offices, but more needs to be done. The subcommittee's recommendations are designed to achieve solutions to reduce the financial, temporal, medical and emotional burden that bed bugs impose. The subcommittee heard testimony 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 U.S. Environmental Protection Agency. The subcommittee 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.

PUBLIC AWARENESS AND EDUCATION

Public awareness, early detection of bed bugs, and integrated pest management (as defined in 225 ILCS 235/3.25) are important in making and keeping structures free of infestation. Many persons become aware of bed bugs through the news media that often highlight the insect's blood-sucking behavior, or lawsuits sparked by bed bug activity, instead of the practical information on recognition, prevention and control. Persons exposed to bed bugs often turn to the Internet for information or rely on pest management professionals. A 2010 survey found more than one-third of respondents say they would attempt to treat a bed bug infestation themselves before calling a pest management professional. Professional pest management is recommended for bed bug infestations, but it remains unaffordable to some who are 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 (total-release aerosol products known as "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.

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. The subcommittee believes the Department should assume the responsibility to educate the public with regard to bed bugs, but acknowledges resources are a limiting factor.

RESPONSIBILITY FOR BED BUG MANAGEMENT IN RENTED DWELLINGS

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

The Department 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. Frequently cited as reasons why beg bugs remain a problem are landlord claims the tenant brought bed bugs into the building, and therefore the bugs are the tenant's responsibility; or the landlord is doing in-house pest control or has employed a pest control service that has been inadequate. If bed bug management is to succeed, these types of complaints highlight the need for communication, coordination and cooperation between landlords and tenants.

After considering testimony and information from landlords, landlord organizations, tenant advocates, pest management professionals and other concerned parties, the subcommittee established principles for 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 sources of bed bug infestation or how to prevent infestations or detect early signs of infestation, allowing bed bugs to spread.

Poor public awareness and the use of outdated or inaccurate information about bed bugs and their control occasionally prompt landlords and tenants to employ ineffective treatment methods that can delay control and cause excessive exposures to pesticides. Tenants, who 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 other units, increasing the landlord's cost of management and expense, and exacerbating the anguish and negative health impacts experienced by tenants.

Therefore, it is the consensus of the subcommittee that:

- 1) The Department be funded to produce an informational bed bug pamphlet containing:
 - Identification, biology and signs of activity, including photographs or illustrations of bed
 - Prevention and control of infestation and managing bed bugs.
 - When and how to properly discard infested items.
 - Tenant responsibilities, such as notifying landlords of infestation, preparing units for treatment, and allowing access for inspection and treatment.
 - Landlord responsibilities, including coordinating and contracting pest management
 - A statement that says: "As a tenant, you cannot be punished (evicted, made to forfeit security deposit) for reporting the presence of bed bugs in your building to the landlord/manager."
 - A list of bed bug resources.

Once prepared, the pamphlet will be subject to a non-binding 60-day public comment period before distribution. After publication, landlords would be required to provide it to 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) have important roles and responsibilities in effective bed bug management in multi-unit rental dwellings.

It is the landlord's responsibility to coordinate and to contract bed bug control in multi-unit rental dwellings. Landlords are able to disseminate information to tenants, to gain access to all units, and to secure and to coordinate pest control services. Landlords, however, cannot do this without tenant cooperation and PMPs. Both have shared responsibility and should share accountability. It is the subcommittee's 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 cost of effective treatment. Landlords, tenants and PMPs have roles to play and, if not played properly, bed bug management will likely fail.

Tenants and building staff should make the landlord aware of infestations as soon as suspected. Within a reasonable timeframe after learning of a possible infestation, landlords should notify 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.

Landlords and PMPs should instruct tenants to reduce clutter, and launder clothing and bedding. The cooperation of tenants is necessary to minimize disruption to their households, to limit the likelihood of additional treatments and to reduce the potential for bed bugs dispersal to other units. Pest management professionals also should provide information about the treatments they apply. Public health officials should be given the authority and funding necessary to hold landlords, tenants and PMPs accountable for their roles in bed bug management.

Therefore, it is the consensus of the subcommittee that:

- 1) Landlords are responsible for managing bed bugs in units and common areas of the rented dwellings. Within five business days of a tenant's written notice that the unit may be infested, landlords must have the unit inspected, per lease terms, by a licensed pest control professional or person with sufficient knowledge of bed bugs. If the inspector discovers evidence of bed bug activity, within five 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 for bed bug management. ⁸ The landlord should notify the tenant 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 and accepted guidelines for bed bug management. ^{3,8} Landlords must disclose to prospective renters whether bed bugs have been found in a unit and whether the unit has been treated for bed bugs within the last 60 days.
- 3) A tenant, who has received the Department's bed bug pamphlet and is deemed mentally and physically capable, is responsible for promptly informing the landlord in writing if they discover signs of bed bug activity in their unit. 4
- 4) Tenants must grant access to their unit for purposes of pest inspection and treatment following notice of intent from the landlord. Upon notification, tenants must follow recommendations with regard to the preparation of units for treatment and shall complete preparation within five business days.

- 5) Tenants who 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.
- 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 of pesticides to be applied in the unit.
- 7) Similarly, it is recommended that condominium associations' bylaws specify condominium owners deal 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.

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) 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, which can be used for sleeping or reclining purposes) shall be labeled as new or used.
- 2) Manufacturers and refurbishers whose bedding products may be sold within the state shall register with the Department on or before January 1 of each year and shall pay a registration fee.
- 3) Manufacturers and refurbishers 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 Department 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) Persons who violate 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.

The Department has not been appropriated the funding necessary to enforce provisions of the Safe and Hygienic Bed Act.

The subcommittee believes the act, if enforced, would be a useful check on the spread of bed bugs. Bed bugs typically infest structures by "hitchhiking" on items. These can include personal items, (e.g., clothing, luggage, backpacks and purses) and items obtained from garage sales, flea markets, auctions, new and used furniture dealers, private sales and discarded goods. Bed bugs also are found in delivery vehicles and warehouses, and can infest households when new mattresses are delivered and old mattresses that may be infested are picked up by the same vehicle. Enforcement of the act would protect consumers from bed bugs by helping them recognize items as new or used, and by helping to ensure the purchased bedding items 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.

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. Items that cannot be rid 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. If discarded in a landfill, the item shall be 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 Department shall be initially funded to enforce the act. It is recommended that a tax be imposed on the sale of new and used mattresses and box springs to provide ongoing funding for enforcement. Tax income not needed to fund the enforcement program shall be used to subsidize distribution of mattress/box spring encasements and/or bed bug traps to low and no-income residents.
- 4) To further prevent the spread of bed bugs, it is suggested that the mattress and waste management industries collaborate with the Department to further strengthen the act.

RESPONSIBILITY FOR BED BUG MANAGEMENT IN LODGING FACILITIES

Lodging facilities, such as hotels, motels, and bed-and-breakfast establishments, are regulated to some degree by both municipal authorities and local health departments. In addition to applicable local ordinances, which in general do not specifically reference bed bugs, lodging facilities within city limits fall 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 to attempt to resolve bed bug complaints and issues in lodging facilities. However, due to the ambiguity and general lack of regulation, and because municipal code enforcement personnel have not been trained or budgeted to respond to bed bug issues, municipalities have been reluctant to take action 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 authority encompasses lodging facilities' food-handling and swimming pool safety, local health departments have "nuisance" jurisdiction only in unincorporated areas, whereas most lodging facilities are located in incorporated areas.

Unlike other municipalities, Chicago has the essential language to give the Chicago Department of Public Health the authority to inspect lodging facilities for purposes of resolving bed bug issues and to levy fines when establishments do not comply. ⁷ The subcommittee believes the majority of lodging establishments are prepared to manage bed bugs, having established protocols to deal swiftly and adequately with infestations, and most do not require additional incentives. The subcommittee also believes a state law similar to that enforced by Chicago should be enacted to provide local health departments with the

authority to eliminate ambiguity that might result from the separate promulgation of bed bug statutes by municipalities.

Therefore, it is the consensus of the subcommittee that:

- 1) Local health departments should be given regulatory enforcement authority to respond to complaints of bed bugs in lodging establishments and to respond whenever local health department personnel have reasonable suspicion bed bugs are present.
- 2) Lodging facility personnel must grant access to local health department inspectors who declare they are investigating a possible bed bug infestation and should comply with remedial actions suggested by the inspectors. Remedial actions that may be enforced by local health departments include retaining a licensed pest management company to manage bed bug infestations, ensuring hotel staff recognize signs of bed bug activity and react appropriately, attending educational seminars on bed bugs and their control, and levying fines for noncompliance.
- 3) The Department must ensure appropriate local health department personnel receive adequate training in bed bug identification, behavior, prevention and control, and sufficient funds must be allocated to provide the training.
- 4) Lodging facility personnel should not be permitted to assign guests to rooms suspected to be bed bug-infested.
- 5) Municipalities also may respond to suspected bed bug infestations in lodging facilities. 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. ² The Department and local health departments are in position to serve the public by acting as clearinghouses for bed bug information and by providing informational support to those with bed bug problems. Local health departments currently provide solutions to problems with other types of pests, but the training and funding resources necessary to answer bed bug inquiries are not available.

Therefore, it is the consensus of the subcommittee that:

- 1) The Department shall be adequately funded to assume primary responsibility for providing bed bug training to local health department and municipality personnel and for preparing, making available on the Internet, printing and distributing multilingual bed bug information, including a pamphlet landlords shall provide to new and lease-renewing tenants.
- 2) Local health departments shall be adequately funded to conduct bed bug inspections of lodging establishments and investigations of tenants who fail to notify landlords of bed bug infestation in their units.
- 3) The Department shall be funded to establish the mattress and bedding manufacturer registration program and other obligations as specified in the Illinois Safe and Hygienic Bed Act.
- 4) The state should purchase mattress/box spring encasements and bed bug monitors (traps), approved by the Department, to be distributed to low and no-income residents by non-profit or charitable organizations.

LITERATURE CITED

- 1. U.S. Centers for Disease Control and Prevention and U.S. Environmental Protection Agency, 2010. Joint statement on bed bug control in the United States from the U.S. Centers for Disease Control and Prevention (CDC) and the U.S. Environmental Protection Agency (EPA) (http://www.cdc.gov/nceh/ehs/publications/bed_bugs_cdc-epa_statement.htm) [accessed 22 June 2011]
- 2. Eddy, C. and S.C. Jones, 2011. Bed bugs, public health, and social justice: Part 1, a call to action. Journal of Environmental Health 73(8): 8-14.
- 3. State of Illinois, 2011. Structural Pest Control Act and Code. Illinois Compiled Statutes, 225 ILCS 235/01-26.
- 4. Illinois Department of Public Health, 2011. Bed bugs: Identification and Inspection. (http://www.idph.state.il.us/envhealth/BedBugID Inspection.pdf) [accessed 18 July 2011]
- 5. Henricksen, M., 2011. Bed bugs in America: Public perceptions and the impact bed bugs have on everyday life; Executive summary for industry professionals. http://www.pestworld.org/bedbugs-in-america [accessed August 2011]
- **6.** Kells, S.A., 2006. Bed bugs: a systemic pest within society. American Entomologist 52(2): 107-
- 7. Municipal Code of Chicago, 2011. Residential Landlord and Tenant Ordinance, Title 5, Chapter 12, 010-200.
- **8.** National Pest Management Association, 2011. BMP: bed bugs, best management practices. (http://www.npmapestworld.org/publicpolicy/documents/NPMABedBugBMPAPPROVED20110 124_prettified.pdf) [accessed 18 July 2011]
- 9. New York City Department of Health and Mental Hygiene, 2009. Community health survey 2009 public use data codebook (http://www.nyc.gov/html/doh/html/survey/chsdata.shtml) [accessed 21 June 2011]
- 10. New York City Department of Housing Preservation and Development. 2010. New york vs. bed bugs (http://newyorkvsbedbugs.org/wp-content/uploads/2010/07/NYC-bed-bug-statistics-FY-2010-update.pdf) [accessed 21 June 2011]
- 11. Orkin, 2011. Orkin's top 50 bed bug cities. (http://www.orkin.com/press-room/top-bed-bugcities) [accessed 25 August 2011]
- 12. Potter, M.F., 2011. The history of bed bug management with lessons from the past. American Entomologist 57(1): 14-25.
- 13. PRNewswire, 2011. New Terminix Top 15 Ranking Shines Light on Critters That Hide in the Dark. (http://www.prnewswire.com/news-releases/annual-list-identifies-where-bedbugs-bitemost-across-us-122598653.html) [accessed 25 August 2011]