



TO: Robert W. Healy, City Manager
FROM: Claude-Alix Jacob, Chief Public Health Officer
DATE: March 30, 2010
SUBJECT: Response to Policy Order #6, adopted 3/1/10

Text of Order: That the City Manager be and hereby is requested to confer with companies that offer donated and reduced price mattress encasings used to protect against bed bugs, such as National Allergy Supply, and to forward that information to shelters, the Cambridge Housing Authority, and Tenant Presidents in Housing Authority buildings throughout the City; and be it further that the City Manager be and hereby is requested to report back to the City Council the protocol for dealing with a bedbug infestation and extermination and instruct the Cambridge Public Health Department to work with the Cambridge Housing Authority, the Department of Human Services and the Multi-Service Center to address this protocol and the associated costs for residents.

As discussed in prior City Council order responses, the growing concern about bed bugs reflects a significant increase in the activity of these pests in North America over the past decade. Local public health departments and pest control professionals in the United States have had to educate themselves about bed bug behavior and current approaches for eradicating these invaders, and to keep up with emerging approaches. This resurgence of bed bugs has impacted residents of all Cambridge neighborhoods, as well as many of the City's hotels. Many of those impacted are not equipped with good information and may be unaware of laws protecting them.

Background

Bed bugs (*Cimex lectularius*) are flat, flightless insects that feed exclusively on the blood of warm-blooded animals.

For nearly five decades after World War II, bed bug infestations were rare occurrences in the United States. These insects were largely eradicated due to powerful, long-lasting pesticides that were routinely used indoors, as well the widespread use of vacuum cleaners.^{1,2}

In the late 1990s, however, bed bugs regained their foothold in the U.S., as well as Canada, Europe, and other countries. Experts have proposed several theories to explain the resurgence of these pests, including the U.S. Environmental Protection Agency's ban on strong insecticides like DDT, resistance to pesticides used currently, reduction of natural predators (like cockroaches), the cyclical nature of insect proliferations, and the rise of global travel and trade. Some have speculated that global climate change may have played a role in their return, but a specific mechanism has not been identified to show causation.

¹ J.L. Gangloff-Kaufmann and C. Pichler, *Guidelines for Prevention and Management of Bed Bugs in Shelters and Group Living Facilities*, New York State Integrated Pest Management Program, Cornell University, 2008. Available at: http://www.nysipm.cornell.edu/publications/bb_guidelines.

² J.L. Gangloff-Kaufmann and J Schultz, *Bed bugs are back! An IPM answer*, New York State Integrated Pest Management Program, Cornell University, 2003. Available at: www.nysipm.cornell.edu/publications/bed_bugs/files/bed_bug.pdf.





Contrary to the myth that bed bugs are associated with poor hygiene or poverty, infestations have been reported in hotels (including some of the finest in the country), cruise ships, hospitals, theaters, college dormitories, laboratories, airports, single-family homes, and many other places.³

Successful elimination of these insects is particularly difficult compared to many other pests.

Who Is Responsible for Bed Bug Eradication?

Under Massachusetts law, renters are entitled to a safe and habitable living environment throughout their entire tenancy. The State Sanitary Code (105 CMR 410) was enacted to protect the health, safety, and well-being of tenants and the general public.

As mandated under the Code, an owner must maintain a rental unit free from rodents, cockroaches, and insect infestation, if there are two or more units in the building.⁴ In this situation, the State Sanitary Code assigns the sole responsibility to exterminate insect infestations, including bed bugs, to the building owner(s). Thus, in the case of a bed bug infestation, a Cambridge renter in a multi-unit building would only be responsible for incidental costs associated with the infestation, such as laundry and selective replacement of furniture or mattresses if they were harboring bed bugs. If there is a contract between renter and owner that assigns responsibility for these incidental costs to the owner, this may take precedence under the law.

Tenants who rent a single family home, however, are responsible for maintaining the unit free from rodents, cockroaches, and insect infestations.⁵

Cambridge Bed Bug Response Protocol

In Massachusetts, if an owner/landlord fails to respond to a tenant's complaint about a sanitary code violation (such as a bed bug infestation), the tenant may request that a code enforcement officer or the local board of health inspect the apartment. An inspector will then come to the apartment, review the conditions, and order the responsible party to correct the problem.⁶

In Cambridge, the City's **Inspectional Services Department (ISD)** is responsible for enforcing the State Sanitary Code. With regard to bed bug inspections, the ISD protocol is as follows:

- Inspectors perform visual inspections of residences upon request and look for living bed bugs on the bed, box spring, and frame, and in the immediate area.
- In cases where no living bugs are found, the inspector will order the landlord to have the unit inspected professionally.

³ J.L. Gangloff-Kaufmann and J Schultz, *Bed bugs are back! An IPM answer.*

⁴ "Tenant Rights and Responsibilities," MA Office of Consumer Affairs & Business Regulation, available at: www.mass.gov/?pageID=ocaterminal&L=4&L0=Home&L1=Consumer&L2=Housing+Information&L3=Tenant+%26+Landlord&sid=Eoca&b=terminalcontent&f=tenants_rights_and_responsibilities&csid=Eoca.

⁵ 105 CMR 410.550 (A).

⁶ "State Sanitary Code," Office of the Attorney General of Massachusetts, available at:

www.mass.gov/?pageID=cagoterminal&L=4&L0=Home&L1=Consumer+Protection&L2=Home+%26+Housing&L3=Landlord+and+Tenant+Law&sid=Cago&b=terminalcontent&f=consumer_state_sanitary_code&csid=Cago





- If living bugs are found, the adjacent units surrounding an infested unit will also be inspected and, if necessary, treated.
- Inspectors check with tenants after one week to make certain they have received notice from the pest control company of scheduled inspections and treatments. Multiple treatments are often necessary since pesticides do not kill bed bug eggs, and are usually performed about two weeks apart to ensure that newly-hatched bed bugs are eradicated.

ISD inspections are offered free of charge. These inspections are conducted for the purpose of enforcing the State Sanitary Code, so any observed violations may be cited by the inspector.

Tenants are expected to play an active role in the extermination process as per instruction of the pest control company, which most often involves removing all clutter from rooms and closets, washing and drying clothes on high heat settings, and storing clean clothes in plastic bags until the bed bugs have been eradicated.

The **Cambridge Public Health Department (CPHD)** works closely with ISD on complex cases. CPHD also provides community-wide education and technical assistance on “better practices” in dealing with bed bugs. In addition, the department helps tenants navigate the system and understand their rights under the State Sanitary Code. Staff also assist homeowners and property managers seeking technical guidance and information. Finally, department staff accept specimens from residents for proper identification.

Recommendations for Preventing Infestations & Reducing Treatment Costs

CPHD staff will continue to work with the Inspectional Services Department, the Department of Human Service Programs, the Cambridge Housing Authority, and the Multi-Service Center to share knowledge of effective intervention strategies and help reduce incidental costs for low-income residents.

Specific recommendations include:

- **Promoting a comprehensive plan for reducing infestations in Cambridge:** Promoting greater knowledge among residents, owners, and property management companies about avoidance, identification, and elimination of bed bugs is the single best strategy for reducing the number of bed bug infestations in Cambridge. To this end, the City and its departments should continue to discourage practices that promote the spread of bed bugs, like acquiring mattresses or upholstered furniture put out for the trash and deficient pest control operator methods and materials. Through continuing education of residents, property owners, city staff, and pest control professionals—and better monitoring of households that have experienced infestations—CPHD and ISD should be able to reduce bed bug activity in the City.
- **Reducing incidental costs for low-income residents:** CPHD can help identify vendors that offer better prices, better products, and may occasionally offer surplus items at lower cost or no cost. With regard to mattress casings, * CPHD currently maintains a supply of

* Properly fitted and well-made mattress encasings (or allergen barrier covers) help prevent bed bug bites, and reduce the extent and duration of infestations by isolating the mattress and box spring in well-fitted, sturdy, zippered covers. By containing these pests until they die, a process which can take up to a year, residents can protect themselves and their families while avoiding the expense of replacing these items.





these covers for distribution to families enrolled with the Cambridge-Somerville Healthy Homes Program, a home-based intervention for families with children who have asthma. This fiscal year, CPHD has arranged to purchase an additional supply of covers to offer families who have contacted or been referred to the department because of bed bug infestations. While CPHD cannot offer these items to *every* household with reported bed bug activity, staff will make every effort to ensure that families in greatest need receive them at no charge.

It is worth noting that well-meaning initiatives in other cities offering direct financial assistance, such as coupons for mattress replacement, have been shown to be worth the investment only when residents and owners understand where the bed bugs are harbored, how to correctly identify the insect and its bites, how to properly prepare for pest control treatments, and how to avoid reintroducing bed bugs once they are eradicated.

- **Technical Guidance:** CPHD staff will continue to offer the most up-to-date technical guidance to partner agencies (e.g., Cambridge Housing Authority, Department of Human Service Programs, and the Cambridge Multi-Service Center), as well as residents and owners.

As members of the Greater Boston Bed Bug Task Force, CPHD and ISD are often made aware of the most effective strategies for eliminating these pests. The task force, which is comprised of local and regional health regulators, pest control professionals, and educators, promotes bed bug awareness, prevention, and elimination using the best strategies available.