

**Project Report:** Bed Bug Compendium and Bed Bug Outreach Efforts, 2017

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**Abstract:**

Household bed bug infestations continue to occur in New York State and across the United States. Once mainly common in crowded urban areas, bed bugs have made their way to smaller communities, particularly in Upstate New York, where fewer resources exist for eradication, such as landlord funds and bed bug expertise in the pest management industry. In an effort to help all residents of New York and beyond to cope with bed bugs in an efficient and cost-effective way, we designed the guidebook titled “How to Get Bed Bugs Out of Your Belongings”. This is a guide to non-chemical treatment of household items that would otherwise be discarded or overlooked as bed bug harborage, causing reinfestation. The goal is to help residents hang on to their possessions by eliminating bed bugs from them in safe, effective and affordable ways. Treating household items by washing, vacuuming, heating, and storage in isolation will help residents avoid costly replacement of items and reinfestation of bed bugs after professional household treatments (which are not applied to most personal belongings).

**Background and Justification:**

It has been recognized by both the scientific community as well as the general public that incidence of bed bugs, *Cimex lectularius* L. (Heteroptera: Cimicidae), in the United States is has been growing since the late 1990’s (Anderson and Leffler, 2008; Coghlan, 2002; Burgess, 2003). Every region of the United States is affected. Although not a disease vector, the emotional, health and financial implications associated with these blood-feeding insects are significant. Bed bugs are often in household items, including furniture, clothing, books, pet bedding, shoes, toys, curtain rods and more. Management of bed bugs requires the use of an IPM approach that includes cleaning and organizing of items in the home, which can be daunting for some. There are over 7.2 million households in New York State, alone, untold thousands of which have been affected by bed bugs. Underserved and vulnerable residents are most highly impacted by the financial and social strain of bed bug infestation. The urgency felt by those affected often results in the disposal of possessions, leading to financial burdens, possible spread of bed bugs to other homes, and excessive over-the-counter pesticide use. The CDC reports that the vast majority of pesticide poisonings related to bed bug management have occurred in New York (CDC 2011). IPM information is urgently needed to enable residents to treat and save their personal belongings and reduce reinfestation as part of the overall IPM strategy for managing bed bugs.

To increase adoption of IPM practices in housing and to address resident exposure to pesticide residues we proposed to create a unique comprehensive body of instructions for treating household goods infested with bed bugs that will be available as an indexed, illustrated,

printable, on-line document. This “Compendium” of management tools for bed bugs found in household goods includes, but is not limited to, the use of heat, steam, cold, soap and water, isolation and time.

**Objectives:**

1. Develop a compendium of household items that can become infested with bed bugs.
2. Describe methods to eliminate bed bugs from household items, with input from pest management industry experience and colleagues in extension.
3. Draft, edit and publish the compendium with a relatable title.
4. Promote the new resource through social media and in workshops and with colleagues and CCE.

**Activities:**

NYSIPM educators, Matt Frye and Jody Gangloff-Kaufmann, compiled, documented and photographed the most effective and inexpensive remediation techniques that are recommended by pest management industry professionals, extension colleagues, bed bug experts and the Nassau County Bed Bug Task Force (NCBBTF). This compendium now bears the title “How to Get Bed Bugs Out of Your Belongings”. It is 72 pages long, contains a list of 122 categories of household belongings including furniture, clothing, accessories, electronics, appliances, and many smaller items. This handy guidebook is nearly ready for publication and will be housed as an electronic, printable document indexed by household item with management strategies described step-by-step.

**Results and Discussion:**

Adoption of effective and inexpensive control methods is expected to reduce the applications of pesticides, reducing human exposure. The reader will learn to adopt IPM using these methods rather than pesticides, saving money and their belongings. Individuals will have the instructions needed to eliminate bed bugs from items often overlooked by pest managers; therefore bed bug control in the home and community will be more successful. There will also be a lower likelihood of transfer of bed bugs from home to home caused by people salvaging discarded items from the trash. Second hand items and donations will also be effectively treated for bed bugs with confidence. Effective bed bug management resulting from this publication will alleviate and prevent physical and mental health issues caused by bed bug infestations. Financial stresses will be lessened as individuals and pest professionals become more confident and successful in managing bed bugs. Greater public awareness of bed bugs will continue to promote early detection and intervention, which reduces the need for monetary and chemical inputs. IPM staff will promote this information at regular bed bug management trainings and the many workshops held around the state. It is anticipated that the compendium will have great impact throughout the United States and beyond, based on the popularity of our bed bug FAQ page that has received close to 1 million page views since 2010.

We anticipate that our guide “How to Get Bed Bugs Out of Your Belongings” will be up online before Spring 2018, as we are waiting for help from our graphic designer on cover and front matter.

**References:**

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