Author: J.L. Gangloff-Kaufmann, NYS IPM Program, Cornell University. For more information contact the New York State IPM Program at www.nysipm.cornell.edu or jlg23@cornell.edu. 7/2008 © NYS IPM, Cornell University

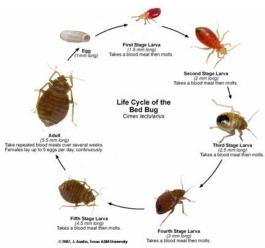


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The Northeastern Integrated Pest Management Center fosters the development and adoption of IPM, a science-based approach to managing pests in ways that generate economic, environmental, and human health benefits. We work in partnership with stakeholders from agricultural, urban, and rural settings to identify and address regional priorities for research, education, and outreach. **Correct identification!** Bed bugs may be confused with other household insects such as cockroaches, carpet beetles, or spider beetles. If you find an insect that may be a bed bug, SAVE IT in a container for identification!



**Bed bug life cycle**– Under good conditions (75° F) the time from egg to adult can be 4-6 weeks. Females can lay up to 300-400 eggs over their lifetime of about a year.



**German cockroaches**– Young roaches look like bed bugs. Look for egg cases and tiny rectangular fecal pellets to confirm cockroaches. Bed bugs leave round fecal drops behind.



**Carpet and warehouse beetle adults and larvae.** Adults and larvae may appear in beds because they feed on hairs and feathers. The larvae shed hairs that can cause itching. Carpet beetles do not bite and cause no health risk. Thorough cleaning is required to get rid of them.



Shiny spider beetles. Adult spider beetles are sometimes confused with bed bugs and ticks. Spider beetles feed on dried plant materials, seeds, or dried meats and do not harm humans. They are common indoors. Thorough cleaning is necessary to get rid of them.

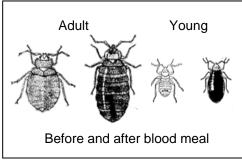


# How to Protect You and Your Family from Bed Bugs

#### Introduction

Bed bugs, like mosquitoes, are insects that feed on blood. Unlike mosquitoes, bed bugs live in the home, especially in the bed, and usually bite at night when people are usually sleeping. They will feed during the day.

Bed bugs have three main stages of life, the egg, the young and the adult. Young bed bugs can vary in size from poppy seed to sesame seed, and adults can be as big as an apple seed. All are tan or brownish-red in color. They may be full of blood, as seen below.



These bed bugs are drawn larger than actual size

The first sign of bed bugs is usually a group of bites. If you experience bites, look for bed bugs in your bed or where you have slept recently. Have you been outside in warm weather? It could be mosquito or flea bites. Everyone reacts differently to bed bug bites, some don't react at all, some develop itchy lumps.

### Fast Facts about Bed Bugs Bed bugs:

- \* Do not transmit diseases to people
- \* May trigger asthma
- \* Can not fly or jump, but can run fast
- \* Are large enough to be seen
- \* Can be transported in personal belongings
- \* Are often found on thrown out furniture
- \* Can travel through a building
- \* Can be difficult to control
- \* Can be eliminated and prevented

#### Actual sizes:

Adult Voung

• Egg or newly hatched



Bed bug adult and droppings on a mattress. Photo by Harold J. Harlan.



Bed bug droppings and eggs. Photo by Gary Alpert.

## Where to Look for Bed Bugs

- \* Check bedding for stains
- \* Under the mattress and pillows.
- Seams and puckers of mattress and box spring, under mattress and box spring
- \* Bed frame, floor, and base molding
- \* Inside and beneath nightstand drawers
- \* Radios, phones, and clocks near the bed



Bed bugs and residue on back of vinyl molding. Photo by Louis Sorkin.

## How to Help Yourself

- \* Don't panic, bed bugs are not life threatening.
- \* Call your building manager if you think there may be bed bugs in your living area.
- \* Follow all instructions given to you.
- Wash and DRY your clothing and bedding, 30 minutes of heat kills bugs and their eggs.
- Encase your mattress and box spring
- \* Wash donated clothing before wearing.
- \* Do not take furniture or items from the street, they might have bed bugs.
- \* Do not try to use pesticides on your own.
- \* Bug bombs are **not** effective for bed bugs.
- \* Talk to others about it; bed bugs are common today.
- \* Hire a pest control company.

Ask for help. Talk to your neighbors. Contact your building manager. Get the word out.