Indiana State Department of Health | Epidemiology Resource Center

Quick Facts

About… Bed bugs

What are bed bugs?

Bed bugs, *Cimex lectularius*, reddish-brown, oval-shaped, flattened insects that are about 1/4 inch long. Nymphs (immature bed bugs) resemble the adult bugs but are often smaller and lighter in color. Bed bugs usually feed on the blood of humans during the night-time hours and crawl away to hide in nearby cracks, crevices and recesses of furniture (especially mattresses) and walls of the home during the day. Most people experience itching, pain and/or swelling of the skin where a bed bug bite occurs (such as the arms, face or back) within 1 day of a bite. Although the bites can cause considerable discomfort and loss of sleep, bed bugs do not transmit disease after feeding on multiple hosts.

How are bed bugs spread?

Bedbugs are spread through the acquisition of infested second-hand furniture or by hitch-hiking on items used during travel such as suitcases, outerwear and other belongings. Once established, bugs can then move throughout a building by crawling or transport on humans.

Who is at risk for bed bugs?

Bed bugs are commonly found in large buildings such as apartments, dorms, prisons, hospitals and hotels; however, infestations can also occur in private residences. Bed bugs are sometimes thought to occur only in poor and unsanitary conditions. This is not the case. Bed bugs can be found even in very clean environments.

How are bed bugs identified?

Bed bug infestations can be evidenced by the presence of actual bugs, their light-brown skins (shed during metamorphosis into adulthood), dark spots of

excretement and blood spots or stains on bedding, upholstered furniture or walls. When looking for an infestation, use a flashlight and be sure to carefully and systematically check the following areas:

- Along mattress seams
- Under the gauze covering of box springs (where fabric is stapled to the wooden frame)
- Behind wall mounted objects and bed headboards
- Inside cracks and crevices of upholstered and wooden furniture (and underneath furniture)
- Cracks in wood molding
- Under the edge of wall to wall carpeting
- Under loose wall paper
- Among clutter stored in closets

Remember that there are other bugs that look like bed bugs and some even bite humans and produce similar bite-like reactions. Before treating an infestation, it is very important to correctly identify the bug. Enlist the help of a professional to properly identify the bugs. You may contact the IN State Dept of Health Entomology Lab (317-351-7190), or the Purdue University Plant and Pest Diagnostic Laboratory (765-794-7071) or visit the Purdue University website at:**http://www.ppdl.purdue.edu/ppdl/samples.html** for further information on specimen submission.

What treatment is recommended for bed bug bites?

Treatment of the bed bug bites consists of treating the itching and inflammation associated with the bites. Drugs called antihistamines and/or corticosteroids may be prescribed to reduce allergic reactions. Antimicrobial ointment may prevent secondary infection.

How are bed bug infestations controlled?

Erradication of a bed bug infestation is difficult and should be performed with the help of a professional pest control company who has an understanding of approved insecticides and the proper equipment. Professional pest control companies will examine a residence and make recommendations of the tenant and/or owner, such as removing excess clutter and moving furniture away from the walls. Mutual cooperation is key to eliminating bed bugs. Multiple treatments of the area may be needed and it is very important to also treat adjoining rooms and apartments (sometimes even the entire building) for bed bugs. Currently used insecticides include inorganic dusts, cyfluthrin, bendiocarb, propoxur and permethrin.

Items that can not safely be treated with insecticides, such as bedding and clothing will need to be bagged (to prevent the spread of bed bugs) and then immediately laundered in very hot, soapy water and placed in the dryer on the high heat. Toys, backpacks, and other clothing that can not be washed should be placed in the dryer for at least 10 minutes on high heat. All bags

used to vacuum an infested area should be sealed in a plastic bag prior to disposal. The professional pest control operator may recommend the disposal of beds, mattresses and upholstered furniture. When items are discarded, it is important to bag or wrap them so that bugs are not dislodged on the way to the dumpster and to break them as well as label them "bed bug infested" to prevent them from being taken and used by others.

How can I prevent bed bug infestations?

Insect repellents are not effective against bed bugs. The best ways to prevent infestation includes extra caution when acquiring used furniture, especially mattresses and couches. This means avoid taking curbside items. When staying in hotels, it is important to check the beds for signs of bed bug infestations and to keep luggage and other personal items on luggage racks away from upholstered surfaces and walls. If you suspect an infestation, be sure to report it to hotel management. It is also recommended to place clothing in disposable plastic bags before unpacking and immediately launder it upon returning home. Luggage may be treated or discarded if exposed to an infestation.

All information presented is intended for public use. For more information, please refer to:

Purdue University Publications:

http://www.extension.entm.purdue.edu/publications/E-249.pdf

http://www.extension.entm.purdue.edu/publications/E- 260.pdf

This page was last reviewed May 2010.