

Recently reported by CNBC news and MSN, Bed Bugs have grown as a health problem through out the United States by 70% since 2000. Below is an excerpt from the September 9, 2009 MSN headlines news report.

Your bed

Have you been on a trip recently? If so, you may have brought home some hitchhikers—of the creepy-crawly variety. Bedbugs, tiny bloodthirsty insects, are hosts to organisms that cause hepatitis B and Chagas disease, say health experts. But the real problem seems to be the infections and allergic reactions that can sometimes result from bedbug bites.

According to the Environmental Protection Agency, bedbugs are on the rise and becoming an increasing health problem. The insects, which hide in the crevices of mattresses and bedding, are showing up everywhere, from hostels to the swankiest hotels, and they often find their way into people's luggage, transporting themselves to unsuspecting homes.

Bed Bugs are non-discriminating to socio and economic cultures and are now found in all walks of life. Once considered under control in the United States, these tiny and dangerous creatures are making a huge come back.

What to do

If you've done some traveling recently, and especially if you've noticed any mysterious bug bites, wash everything in your luggage and consider scrubbing your suitcase with a stiff brush before giving it a good vacuuming.

Go to this link to view the CNBC video: <http://www.cnbc.com/id/15840232?video=1235607279&play=1>

Or go to: www.cnbc.com and enter key word Bed Bugs under video.

Common name: bed bug

scientific name: *Cimex lectularius* Linnaeus (Insecta: Hemiptera: Cimicidae)

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Introduction

Sometimes referred to as "red coats," "chinchies," or "mahogany flats" (USDA 1976), bed bugs, *Cimex lectularius* Linnaeus, are blood feeding parasites of humans, chickens, bats and occasionally domesticated animals (Usinger 1966). Bed bugs are suspected carriers of leprosy, oriental sore, Q-fever, and brucellosis (Krueger 2000) but have never been implicated in the spread of disease to humans (Dolling 1991). After the development and use of modern insecticides, such as DDT, bed bug infestations have virtually disappeared. However, since 1995, pest management professionals have noticed an increase in bed bug related complaints (Krueger 2000).



[Adult feeding](#)

Distribution

Human dwellings, birds nests, and bat caves make the most suitable habitats for bed bugs since they offer warmth, areas to hide, and most importantly hosts on which to feed (Dolling 1991). Bed bugs are not evenly distributed throughout the environment but are instead concentrated in harborages (Usinger 1966). Within human dwellings, harborages include cracks and crevices in walls, furniture, behind wallpaper and wood paneling, or under carpeting (Krueger 2000). Bed bugs are usually only active during night but will feed during the day when hungry (Usinger 1966). Bed bugs can be transported on clothing, in traveler's luggage, or in bedding and furniture (USDA 1976) but lack appendages to enable them to cling to hair, fur, or feathers, so are rarely found on hosts (Dolling 1991).

Description

The adult bed bug is a broadly flattened, ovoid, insect with greatly reduced wings (Schuh and Slater 1995). The reduced fore wings, or hemelytra, are broader than they are long, with a somewhat rectangular appearance. The sides of the pronotum are covered with short, stiff hairs (Furman and Catts 1970). Before feeding, bed bugs are usually brown in color and range from 6 to 9.5 mm in length. After feeding, the body is often swollen and red in color (USDA 1976).



[Adult](#)



[Adult](#)



[Nymph](#)

FACTS YOU SHOULD KNOW!

REGULAR LAUNDRING OF YOUR SHEETS AND BEDDING IS NOT ENOUGH TO PREVENT BED BUGS FROM SPREADING THROUGHOUT YOUR HOME. WITHOUT PROPER TREATMENT, ONCE INFESTATION STARTS IT IS ALMOST IMPOSSIBLE TO STOP IT!

EVERY NON-COMMERCIAL BED MATTRESS IN THE UNITED STATES SHOULD BE TREATED FOR BED BUGS AT LEAST ONCE A YEAR!

AT ANY GIVEN TIME ALMOST ALL BED MATTRESS'S HAVE MILLIONS OF MICROSCOPIC PESTS FEEDING OFF DEAD SKIN CELLS AND DRIED HUMAN BODY FLUIDS!

THE MORE ANNOYING AND DANGEROUS SPECIES CAN GROW TO THE SIZE OF AN APPLE SEED!

The two bed bugs most important to man are the common bed bug, *Cimex lectularius*, and the tropical bed bug, *Cimex hemipterus*. These two species of bed bugs can easily be distinguished by looking at the prothorax, the first segment of the thorax. The prothorax of the common bed bug is more expanded laterally and the extreme margins are more flattened than that of the tropical bed bug (Smith 1973).

Life Cycle

Because of their confined living spaces, copulation among male and female bed bugs is difficult. The female possesses a secondary copulatory aperture, Ribaga's organ or paragenital sinus, on the fourth abdominal sternum where spermatozoa from the male are injected. The spermatozoa then migrate to the ovaries by passing through the haemocoel, or body cavity (Dolling 1991). The female bed bug lays approximately 200 eggs during her life span at a rate of one to 12 eggs per day (Krueger 2000). The eggs are laid on rough surfaces and coated with a transparent cement to adhere them to the substrate (Usinger 1966). Within six to 17 days bed bug nymphs, almost devoid of color, emerge from the eggs. After five molts, which take approximately ten weeks, the nymphs reach maturity (USDA 1976).

Survey and Management

Bed bugs are most active at night, they are extremely shy and wary so their infestations are not easily located (Snetsinger 1997). However, when bed bugs are numerous, a foul odor from oily secretions can easily be detected (USDA 1976). Other recognizable signs of a bed bug infestation include excrement left around points of entry and exit to their hiding places (Dolling 1991) and reddish brown spots on mattresses and furniture (Frishman 2000). Good sanitation is the first step to controlling the spread of bed bugs. **However, upscale hotels and private homes have recently noted infestations**, suggesting that good sanitation is not enough to stop a bed bug infestation (Krueger 2000).

If bed bugs are located in bedding material or mattresses, control should focus on mechanical methods of control, such as vacuuming, caulking and removing or sealing loose wallpaper, **to minimize the use of pesticides** (Frishman 2000). **The effectiveness of using steam cleaners or hot water to clean mattresses is questionable. Heat is readily absorbed by the mattress and does no harm to the bed bug in fact the moisture may produce favorable conditions for house dust mites.** Pillows should be removed and dry-cleaned or replaced (Snetsinger 1997). For severe infestations, however, pesticides may be used. Care should be taken not to soak mattresses and upholstery with pesticides. Allow bedding and furniture to dry thoroughly before using.

[Insect Management Guide for bed bugs](#)

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Nature's Avenger Organics has developed an all natural Bed Bug killer that is shown in clinical tests to be as effective as or better than current poisonous products such as DDT. This new product has recently grown in popularity and success and is now widely used by professional exterminators treating hotels and motels across the country. There currently is no other option available to protect your home safely without using dangerous poisons. Please also refer to the Survey and Management section above as even steam cleaning may not be effective and actually increase the problem for house dust mites and moisture problems.

This safe and effective product is now available for retail sales. For more information contact Phillips Sales and Marketing the exclusive retail distributor at 1-866-584-3101



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