

Sleep Tight.... Don't Let the Bed Bugs Bite...

by Stacy Chiles, RN, CSN

Recently bed bugs have been spreading rapidly throughout parts of the United States and Canada. The common bed bug (*Cimex lectularius*) has long been a pest – feeding on blood, causing itchy bites and generally irritating humans. Before World War II bed bug infestations were common. But with improvements in hygiene, and the widespread use of DDT pesticide during the 1940s and 1950s bed bugs vanished in the United States. But, these pests remained prevalent in other areas of the world including South America, Africa, Asia and Europe.

What are bed bugs?

Bed bugs are small, oval-shaped, reddish-brownish, flattened insects that feed on the blood of people or animals while they sleep. They are approximately 1/4 to 3/8 of inch long, have three pairs of legs and crawl. Young bed bugs (called nymphs) are smaller and lighter in color. Bed bugs typically feed on blood every five to ten days, but they are capable of surviving over a year without feeding. A bed bug bite does not hurt at the time, but it may develop into an itchy welt similar to a mosquito bite. Bed bugs do not spread disease and usually do not pose a serious medical threat, but they can cause significant itchiness, and loss of sleep. A bed bug bite affects each person differently. Bite responses can range from no sign at all, to a small bite mark, to a serious allergic reaction with painful swellings. Bed bugs are not considered to be dangerous; however, an allergic reaction to several bites may need medical attention. Sometimes the itching can lead to excessive scratching that can sometimes increase the chance of a secondary skin infection. The best way to treat a bite is to avoid scratching the area and apply antiseptic creams or lotions and take an antihistamine.

How do I get bed bugs?

Bed bugs are experts at hiding. Usually, bed bugs will hide during the day and only come out to feed during the night. Unlike head lice, they do not live on a person. However, they can hitchhike from one place to another in backpacks, clothing, luggage, books, and other items. Their slim flat bodies allow them to fit into the smallest of spaces and stay there for long periods of time, even without a blood meal. Bed bugs are usually transported from place to place as people travel. The bed bugs travel in the seams and folds of luggage, overnight bags, folded clothes, bedding, furniture, and anywhere else where they can hide. Most people do not realize they are transporting stow-away bed bugs as they travel from location to location, infecting areas as they travel.

Where are bed bugs found?

Bed bug infestations usually occur around or near the areas where people sleep. These areas include apartments, shelters, rooming houses, hotels, cruise ships, buses, trains, and dorm rooms. They hide during the day in places such as seams of mattresses, box springs, bed frames, headboards, dresser tables, inside cracks or crevices, behind wallpaper, or any other clutter or objects around a bed. Bed bugs have been shown to be able to travel over 100 feet in a night but tend to live within 8 feet of where people sleep. They are extremely quick walkers but struggle with smooth polished surfaces. Signs of an infestation include:

- visible bed bugs in the folds of mattresses and sheets,
- rusty-colored blood spots or black spots on the mattress or nearby furniture,
- the bed bugs' exoskeletons after molting,
- possibly a sweet musty odor.

Who is at risk for getting bed bugs?

Everyone is at risk for getting bed bugs when visiting an infected area. However, anyone who travels frequently and shares living and sleeping quarters, where other people have previously slept has a higher risk of being bitten and or spreading a bed bug infestation.

Preventing bed bug infestations

The best way to prevent bed bugs is regular inspection for the signs of an infestation. A few simple precautions can help prevent bed bug infestation in your home:

- Check secondhand furniture, beds, and couches for any signs of bed bug infestation, as described above before bringing them home.
- Use a protective cover that encases mattresses and box springs which eliminates many hiding spots. The light color of the encasement makes bed bugs easier to see. Be sure to purchase a high quality encasement that will resist tearing and check the encasements regularly for holes.
- Reduce clutter in your home to reduce hiding places for bed bugs.
- When traveling and staying in hotel rooms, use luggage racks to hold your luggage when packing or unpacking rather than setting your luggage on the bed or floor. Check the mattress and headboard for signs of bed bugs. Upon returning home, unpack directly into a washing machine and inspect your luggage carefully.

Treating bed bug infestations

Bed bug infestations are very difficult and expensive to control. Getting a pest management professional (PMP) involved as soon as possible rather than taking time to try to treat the problem yourself is very effective at preventing further infestations. Each pest management company should have instructions for residents on how to prepare the unit for a treatment, which will include laundering and cleaning. The PMP will inspect your residence, take apart furniture if necessary and use vacuums, heat and pesticides to treat the infestation. Bed bug control is best maintained through a comprehensive treatment strategy that includes a variety of techniques and constant monitoring. Proper use of pesticides may be one component of the strategy, but will not eliminate bed bugs alone. In addition, bed bugs populations in different geographic areas of the country have developed resistance to many pesticides. If you're dealing with a resistant population, some products and application methods may only make the problem worse. If you suspect that you have an infestation, contact your landlord or professional pest control company that is experienced with treating bed bugs.

Common bed bug myths

Myth: You can't see a bed bug. **Reality:** You should be able to see adult bed bugs, nymphs and eggs with your naked eye.

Myth: Bed bugs live in dirty places. **Reality:** Bed bugs are not attracted to dirt and grime; they are attracted to warmth, blood and carbon dioxide. However, clutter offers more hiding spots.

Myth: Bed bugs transmit diseases. **Reality:** There are no cases that indicate bed bugs pass diseases from one host to another. Lab tests have shown that it is unlikely that the insect is capable of infecting its host.

Myth: Bed bugs won't come out if the room is brightly lit. **Reality:** While bed bugs prefer darkness, keeping the light on at night won't deter these pests from biting you.



Information taken from Centers for Disease Control, PA Department of Health, U.S. Environmental Protection Agency, and Michigan.gov web sites.