

The NEBLINE

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Four days of fun workshops for youth ages 6 & up, June 16-19!

—see pages 9 & 11

Bed Bugs

Come Back with a Vengeance

Controlling Them Quickly is Key to Slowing Their Spread

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UNL Extension Educator

For 40 years, bed bugs seemed to be nearly extinct, but in the last decade, this blood-sucking pest has rebounded with a vengeance. Bed bugs are infesting hotels, motels, apartments, dormitories, nursing and retirement homes and single-family homes. The traditional thinking is bed bugs move from place to place in luggage of travelers, in used furniture or with overnight visitors. But, bed bugs are taking advantage of our mass transit systems and have been found on buses, subways, trains and planes. To my knowledge, this hasn't yet happened in Nebraska, but has happened elsewhere.

In some parts of the U.S., bed bug infestations and complaints have doubled each year since 2003. Unfortunately, there doesn't seem to be a "silver bullet" on the horizon which will slow the spread of these insects.

Bed bugs are non-discriminatory and will feed on anyone, but people in high-density housing are more likely to be infested. This is simply because more people move in and out of hotels/motels, apartment buildings, dormitories and condominiums; more visitors; more people traveling. It is a matter of chance.

Bed bugs have very flat bodies and can squeeze behind baseboards or electrical outlets and move to the next bedroom or apartment unit to find a new food source. Left unchecked, eventually all bedrooms or apartment units will be infested.

Landlords who ignore a bed bug infestation early on will end up with a much larger problem which is more expensive to treat.

For about half the victims, bed bug bites are very itchy. Bed bugs do not seem to transmit diseases...at least it has never been scientifically documented. I confess, I am not a mental health expert, but I think many people who live with bed bugs will experience anxiety, stress and insomnia, knowing when they sleep, small insects will be coming out of cracks and crevices to feed on them.

Control Problems

Purdue University researchers showed even when the best methods were used, it took two or three treatments to eliminate bed bugs from apartments. This study also found bed bugs were still present in some apartments even after four treatments.

They concluded some of their treatment difficulties were due to extreme clutter, which provides many hiding places for bed bugs.

The clutter problem is just one impediment to eradicating bed bugs.

To achieve control most quickly, cooperation is needed between the home inhabitant and the pest control professional. To make insecticide applications more effective, actions are needed the pest control professional can't or won't do. Actions needed by the home inhabitant include:

- laundering bedding (or putting non-washable objects in a hot dryer for 20 minutes).
- vacuuming bed bugs (and freezing or throwing away the vacuum bag).
- purchasing and using specially-made bed bug resistant encasements on mattress and box springs
- throwing heavily-infested furniture away, especially overstuffed sofas and chairs.

Another reason bed bugs are so hard to control is because most bed bug populations are resistant to pyrethroid insecticides. Today, most products labeled for use inside the home are pyrethroids, including products sold to professionals or over-the-counter. Two professional-use products used widely for bed bugs include Demand® (lambda-cyhalothrin) or Suspend® (deltamethrin). University of Kentucky researchers showed bed bugs have some resistance to these pyrethroid products.

Even though there is bed bug resistance to pyrethroids, these insecticides are still better than other products on the market. To kill bed bugs, insecticides must be applied so they "contact" the bed bug. In other words, inspecting and finding all bed bug hiding places and treating bed bugs directly is the key to achieving control.

Economic Issues

Because killing bed bugs takes considerable time and effort, companies which do bed bug control are pricing their services accordingly. Most will charge each time they do a treatment and are unlikely to give warranties. Some will not treat places where there is excessive clutter. At \$75-\$100 or more per visit, many low-income families just can't afford to hire a pest management professional to do the work.

Many people feel there is a negative stigma attached to having bed bugs. Even though bed bug infestations aren't necessarily related to "dirty" houses, some families don't want anyone else to know. They won't tell their landlord.

Not controlling bed bug infestations in a timely manner is the number one reason why bed bugs are spreading so quickly. The longer bed bugs are ignored, the greater the likelihood they will spread to other places. Bed bugs travel in back packs, purses and on clothing as people go about their daily activities. Bed bugs can be taken to



Above — highly magnified view
At right — actual size (3/8"–1/4")



Bed bugs live in groups on porous surfaces like wood or fabric.



Bed bug spots under fabric stapled to the framing of box springs.



Bed bugs in seam of sofa.

daycare centers, schools, doctor's offices and clinics, hospitals, movie theaters and even workplaces.

Treatment Dilemma

So how do we advise low-income families who cannot afford professional treatment to deal with bed bugs? This is a dilemma.

There are over-the-counter (OTC) products which can be purchased by the general public. These products contain the same active ingredients as professional-use products labeled for bed bug control. Unfortunately, these OTC products are not labeled for bed bug control. Some may be labeled for indoor use, on baseboards, carpets, but not on beds. Because it is a federal offense to use pesticides in a manner inconsistent with directions on the label, it would be unthinkable to recommend off-label use of pesticides. It also might pose a health risk for the person using the products and his family, especially when he/she has had no training in controlling bed bugs.

Clearly, using insecticides in bedrooms
see BED BUGS on next page

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