

Bed Bugs

Management Tools for a Healthy Learning Environment

Snug as a Bug in a Rug

Prevent Bed Bugs from Making Themselves
Comfortable in your School

The bed bug (*Cimex lectularius*) is a notorious pest making its home in Colorado. Bed bugs nearly vanished in the United States after World War II, existing only in small, isolated populations. However, the bed bug population has been making a comeback in the United States in the last decade due to the increase in international travel and commerce.

What do bed bugs look like?

Adult bed bugs are reddish-brown in color with oval-shaped bodies covered with short, golden hairs. They lack wings and are therefore unable to fly. Adult bed bugs are about $\frac{1}{4}$ of an inch in length (about the size of a pencil eraser), with relatively flat bodies. After feeding, they may appear dark red in color and elongated. Because the bed bug is very similar in appearance to the bat bug (*C. pilosellus*), another member of this blood-sucking family common in Colorado, it is important to seek professional help for identification before taking further action.

In the average lifespan of 10 months to over one year, a female may lay from 200 to 400 eggs. Eggs are pearly white and only about 1 millimeter in length (about the size of a pinhead). They are laid in crevices, in clusters of 10 to 50, and hatch in about 10 days.

Immature bed bugs look very similar to adults, but are smaller and lighter in color. The young reach adulthood in 5 to 8 weeks. They shed their skins five times before becoming adults. Young bed bugs must take a blood meal before they can shed their skins and grow.



Did You Know?

- Colorado is a bed bug hot spot!
- Bed bugs have been found in hotels, hospitals, college dorms, airports, planes, movie theaters, homes, and in schools.
- Bed bugs mostly feed at night.
- Adult bed bugs can survive up to a year and a half without food.
- Bed bug infestations are very hard to control.
- Beagles can be trained to sniff bed bugs out.



Above:

Adult bed bug (Gary Alpert, Harvard University, Bugwood.org)

Right:

Bed bug eggs (Gary Alpert, Harvard University, Bugwood.org)





Above:

Dark spots (bed bug excrement) on furniture are indicative of bed bugs (Gary Alpert, Harvard University, Bugwood.org).

Below:

Bed bug bites are small, red, and itchy (Fletcher et al. 2002).



Feeding

The common bed bug will feed on a variety of animals, but prefers humans. They feed for about 10 minutes at night, while their victim is sleeping, before retreating back to a sheltered crevice to digest the meal.

The Bite

Initially the bite is painless. Bed bugs are known to bite all over the body, especially exposed areas of skin. Typically a red bump will form at the feeding site associated with minor swelling and itching. People tend to have a range of reactions to bed bug bites—some are unaffected while others may develop an allergic reaction. Fortunately, bed bugs are unable to transmit disease to humans.

Because there is not anything unique about a bed bug bite, it is not possible to diagnose a bed bug infestation from a bite alone. The presence of bed bugs must be confirmed by inspecting the area carefully.



Managing Bed Bugs with Integrated Pest Management

- Inspect and monitor areas with upholstered furniture such as the faculty lounge, office area, and nurse's office. Potential trouble spots include child care facilities and dormitories.
- Inspect donations and lost and found items. Student back-packs and coats may harbor bed bugs as well.
- Remove clutter. Vacuum to remove bed bugs and debris that may serve as shelter.
- Dispose of infested clothing or treat it in a hot dryer (140°F) for at least 20 minutes.
- Eliminate shelter by sealing cracks and crevices with a silicone-based sealant. Seal around utility ducts.
- Using a combination of techniques, with products that pose the lowest risk to health and environment, is most effective in managing bed bugs.
- **Spraying alone is not recommended.**

For more info, check out:

Colorado School IPM: <http://coloradoipmcenter.agsci.colostate.edu/>

"Bat Bugs, Bed Bugs and Relatives": <http://www.ext.colostate.edu/pubs/insect/05574.html>

EPA IPM in Schools: www.epa.gov/pesticides/ipm

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