BED BUGS IN SCHOOLS
BED BUG MYTHS

• Bed bugs transmit disease.
• Bed bugs are more common among lower income households.
• Bed bugs are attracted to dirty homes.

American Pest Management, Inc. survey, 1/12/11
BED BUGS SUCK!

Feed on blood, mainly at night.

Attracted by warmth and CO$_2$. 
HEALTH EFFECTS

- Not known to vector pathogens
- Bites cause mild to serious skin reactions
- Potential allergen and respiratory effects
- Sleep disturbance
- Delusionary parasitosis
- Straw-colored to reddish-brown
- Oval
- Wingless
- Segmented bodies
- Covered with short, golden hairs
- Size of a pencil eraser

*Cimex lectularius*
In Colorado, the most commonly encountered species, after bed bugs, is the bat bug, *Cimex adjunctus*.
LIFE CYCLE

Note: Bed bugs take 3-10 minutes to complete feeding.

First Stage Larva (1.5 mm long) Takes a blood meal then molts.

Second Stage Larva (2 mm long) Takes a blood meal then molts.

Life Cycle of the Bed Bug
Cimex lectularius

Adult (5.5 mm long) Take repeated blood meals over several weeks. Females lay up to 5 eggs per day, continuously.

Third Stage Larva (2.5 mm long) Takes a blood meal then molts.

Fifth Stage Larva (4.5 mm long) Takes a blood meal then molts.

Fourth Stage Larva (3 mm long) Takes a blood meal then molts.

Colorado State University
• Female bed bugs lay > 500 eggs; 2 – 5 eggs per day.

• Eggs laid in crevices.

• From egg to adult in 5 weeks to 4 months.
1st and 2nd instars

2nd instar bed bug (Scale in 32nds of an inch)
• Can survive >18 months without blood

• Adults live about 10 months

• Remain active at <45° F
DETECTION
Inspect for bed bugs, molts, blood, fecal stains, sweet smell.

Look at backpacks, coats, upholstered furniture, faculty lounge, nurse’s office.
The best control strategy is a combination of techniques, using products that pose the lowest risk to our health and environment.

- Dispose of infested items OR treat in hot (140°) dryer for 20 minutes.
- Remove clutter. Vacuum to remove bed bugs and the debris that provides them with shelter.
- Eliminate shelter by sealing cracks and crevices with a silicone based sealant. Seal around utility conduits.
- Spraying alone is NOT recommended.
RESEARCH NEEDED

- New products
- Repellents
- Cold/heat/steam treatment
- Detection
- Biocontrol – fungi, nematodes
WE NEED YOUR HELP!