

# School IPM Action Plan for Bed Bugs

Purdue Extension, Purdue University

Last Updated: June 21, 2012



The most common bed bug type: *Cimex lectularius*



Bed bug feeding on human



Bed bugs on arm and finger

Bed bug, *Cimex lectularius* is the most common species of bed bug, but all species in the family Cimicidae are bed bugs.

## **Basic Information**

In general, school and institutional child care center environments are not conducive to bed bug infestations. Bed bugs prefer an environment where they can hide during the day and come out at night to feed on a sleeping host. Major infestations of schools and child care centers are rare. However, successful pests are adaptable and bed bugs hiding in clothing or backpacks can hitchhike to and from schools and child care centers. Because bed bugs can travel in belongings, it is prudent for schools and child care centers to keep individual children's belongings separate. There is no association between cleanliness and a bed bug infestation. Anyone can experience an infestation. If bed bugs are found or children are experiencing skin conditions that might be associated with bed bugs bites, then it may be necessary to investigate the school or child care settings as well as the child's home setting.

## **Policy Recommendations**

An appropriate response plan would include the following:

- Train staff to identify bed bugs and the signs of bed bugs in the classroom and the children's items. This may include actual insects, cast skins or excessive insect bites on a child.
- Understand the difference between an "introduction" and an "infestation". An infestation can be defined as having virtually all of the life-cycle was present (eggs, nymphs and adults). Finding bed bugs on students will most likely be classified as an introduction into the classroom as opposed to finding bed bugs in the environment (usually classroom), even if the student's jacket or backpack may contain more than one stage of the bed bug life cycle.
- Establish a school Integrated Pest Management Plan with an emphasis on monitoring.
- Any student with bed bugs identified on their person or in their belongings may remain in school until the end of the day, although treating the clothing/belongings or providing a change of clothes before returning to class is advisable.
- Respond promptly to bed bug complaints within the school and through contact and counseling with parents. The longer the bed bug infestations are allowed to persist, the harder they are to eradicate.
- Parents should promptly respond to bed bugs in the home for the health and safety of the family and school community.

## **Roles and Responsibilities**

**Parents have the ultimate responsibility for their children. This includes:**

- Assisting in the prevention and management of bed bugs through regular checks when bed bugs are found in the class, on the child or in the home, educating themselves and

their children, and making immediate arrangements for inspection/treatment when bed bug infestation is suspected or confirmed.

### **School communities have responsibility for:**

- De-cluttering. The most important action school personnel can take is to eliminate clutter that provides harborage for bed bugs and makes inspection, monitoring, simple bed bug removal or any other treatment option difficult.
- Enforcement of school defined procedures for children with evidence of bed bug infestation in the home.
- The classroom where the bed bug was found should be carefully inspected by a trained professional including desks, floors, walls and storage areas for student belongings. A thorough cleaning should be done including vacuuming with special attention to cracks and crevices in furniture, equipment, walls and floors. Materials that can be placed in a dryer should be subject to the the highest heat setting(>120 degrees F) for at least 20 minutes. If a true infestation exists, a licensed pest management professional should treat infested areas and conduct a follow-up inspection.
- Disseminating current information about bed bugs.
- Holding educational sessions for parents and children if necessary.
- Alerting parents when *infestations* have been identified. Alerting parents in cases of "introductions" are left to the discretion of the school.

### **Procedures**

Procedures to follow if a bed bug is found

**Bed bugs can crawl onto or off of a person (or their belongings) at any time. If a suspected bed bug is found on a child, a child's belongings or anywhere else in a school, the following procedures should be followed:**

1. Discretely remove the child, if the bug was found on a child or a child's belongings. The school nurse or a qualified individual should inspect the child's clothing and other belongings. Any bugs found should be removed and collected for identification. Try to keep the specimens as intact as possible. It is important to confirm that the bugs found really are bed bugs before proceeding.
2. If the specimen is confirmed to be a bed bug, the school nurse should notify the affected class or classes, in accordance with any policy the school may have developed.
3. If a confirmed bed bug was found on a child then the school nurse should inform the child's parents. Efforts should be made to identify the behavior that contributed to the source of the infestation at the home so that behaviors can be modified to prevent re-infestations at the source. An inspection report should be sent home with the student. Educational materials should accompany the letter.
4. Parents of all children using the room where the bed bug infestation was found should also be notified, if in accordance with school policy. They should be provided with basic information about bed bugs and strategies to eliminate infestations in homes.

5. Inspect and monitor classrooms. If specimens are confirmed, inspect crevices in baseboards, pictures furniture, window, and door casings, wallpaper, behind electrical switch plates, in telephones, radios, clocks, behind wall mounted art-work. Look for the insects, their cast skins, bug droppings and eggs near crevices.
6. In most instances students should not be excluded from school due to bed bugs. Schools should not be closed due to the discovery of bed bugs unless there is a widespread infestation. The school may become a source of dispersal to others in the school environment. Bed bugs brought into the school in a child's book bag or on their clothing could drop off in the classroom or in a locker. The bed bugs might then be picked up and taken home by another student or staff member inadvertently.

**For children who repeatedly come to school with bed bugs, institute clothing and school item sanitation.**

1. In an infested home, parents should store their child's freshly laundered clothing in sealed plastic bags until they are put on in the morning. This prevents bed bugs from hiding in the clothing and being carried to school.
2. Backpacks, lunchboxes and other items that travel back and forth to school can also be inspected daily and stored in sealed plastic containers at home to prevent bed bugs from getting into them.
3. After repeated discoveries, students could be provided with plastic bags or bins in which to store their belongings in order to prevent any bed bugs from spreading to other students' belongings.
4. At school a "hot box" might be used to heat treat belongings possibly infested. A hot box is an insulated container with a heating element that raises the temperature above 115 degrees, killing bedbugs. They can be purchased for a few hundred dollars or can be constructed using a large styrofoam chest, shelving and a ceramic heater with an automatic safety shutoff. Dryers that contains shelves will also serve the same purpose.

**Further Intervention**

**In the unusual instance where a child repeatedly reports to school showing evidence of bed bugs despite previous notification, education and counseling with parents, further investigation is needed. Repeated bed bug presence may be due to the following:**

- Inability of parents to recognize the scope of an infestation at home
- Failure to effectively treat a recognized infestation, including inability to afford pest control services
- Failure to adhere to recommended clothing and school item sanitation
- There are other sources of bed bugs

**If any of the above issues are thought to be the cause, targeted intervention may be warranted:**

- Increased vigilance and monitoring of suspected bed bug introduction points into the school such as lockers, buses, common areas or other areas where students routinely congregate.
- Monitoring may result in treatment of school facilities and property if an infestation is found in the school or on buses.

**Investigative work into the home life may be required to figure out where repeated bed bug findings are originating.**

- Lack of financial resources to secure pest control.
- A inattentive landlord may be refusing to properly manage pests. There are laws in most states that give tenants recourse in this situation<sup>[1]</sup>.
- It is also possible that the parent/guardian is failing to properly prepare the property for treatment (generally this involves cleaning and organizing).

**If a parent claims to be diligently dealing with an infestation and the student continues to come to school with bed bugs, there may be an alternative source or reason that the parents haven't been successful. It is important to identify behaviors that contributed to the infestation in the first place.**

- Re-infestation from outside of the home (adjoining residences, places a student sleeps or visits, visitors to the home, or other family members)
- Where the child spends time after school, before school or with other family members.
- Cars and other modes of transportation can become infested.
- Non-vigilance or lack of concern on the part of the parent.

### **Rare/Extreme Cases**

**In rare or extreme cases, a school may have to confront a situation where a parent or caregiver is incapable or unwilling to remedy a bed bug infestation in the home. These cases are difficult because a school must weigh several important factors:**

- Providing a healthy, pest-free environment for students to learn is the responsibility of the school.
- Providing a healthy, pest-free environment for the staff is also a responsibility of the school administrators.
- Providing a safe and healthy living environment is a responsibility of the parent and NOT the school.
- Repeated bed bug introductions by a student constitutes a risk to other students and staff. While bed bugs do not transmit disease, they are a health issue because they are blood-feeding, human parasites and the psychological impact reduces quality of life and creates a distracting learning environment. Once established in a home they can cause physical and psychological symptoms, and present a significant economic investment to eradicate. These facts are also true at the school level. Repeated inspections and potential treatment by pest management professionals, anxiety, frustration and lost instructional time on the

part of staff and administrative efforts constitute a serious cost both economically and in educational efficiency.

Bed bug infestations are not only an individual family and school concern, but are of concern for the entire community. Individuals and institutions have their respective responsibilities, but it is incumbent on the community itself to attempt to help its members, particularly those less fortunate, to address an infestation.

While the policy recommendations outlined above do not generally support exclusion of a student for bed bugs, in some cases this option may be needed to be considered for resolution of the situation. Exclusion alone will not solve a bed bug infestation, but may serve to prompt stronger or more effective measures at home.

**Other options in rare or extreme cases may include:**

- Notifying local health/code enforcement- in the case of landlord or neighbor negligence, many families simply do not know the recourses available to them or are concerned about retaliation by the landlord or neighbor.
- Notifying Child Protective Services in instances of suspected neglect.
- Notifying local truancy offices if the child, due to repeated infestation, is missing an excessive amount of school.

Decisions to act through Children's Protective Services or local truancy or prosecutor's offices should be a last resort. Every effort should be made to assist the family with control of bed bugs before taking this action.

Further information on bed bug prevention and response procedures can be found at this Extension site [\[2\]](#)

Contributors: Allie Taisey, Loyal Hall, Faith Oi

<http://www.extension.org/pages/61823/school-ipm-action-plan-for-bed-bugs>