

Bed Bugs: What Schools Need to Know

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they may find their way into schools.*



Bed Bugs: What Schools Need to Know

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Tennessee and many other states have seen an increased number of bed bug infestations troubling residents. As bed bugs infest more and more homes, they may find their way into schools. When this scenario happens, schools need to take action to prevent infestations and stop the bugs from spreading in the school setting.

What are bed bugs?

Bed bugs are small (up to 1/3 inch), brownish, flattened insects that feed on human blood, usually while people sleep. Although the initial bite does not hurt, it may develop into an itchy welt similar to a mosquito bite. Bed bugs are not known to transmit disease, but they can cause significant itchiness, anxiety and sleeplessness. Infestations of the pest are very difficult and expensive to control.

Usually, bed bugs hide during the day and 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.



photo credit, CDC

Adult bed bug.

Could my classroom be infested?

Actual bed bug infestations in schools are rare. More commonly, a few bed bugs hitchhike to school from an infested home by hiding in a student's clothing or backpack. Bed bugs that hitch a ride into the school in one student's backpack could be carried home by another student, making the school a potential hub for bed bug spread. This potential spread is not a minor concern, as bed bugs are very expensive and difficult to eliminate.

If a school plans to use pesticides to control pests indoors, then the pesticide applicator must be under the

direct supervision of a licensed operator as indicated in the Tennessee Code Annotated 62-21-124 and should follow the tenets of integrated pest management, or IPM, (<http://schoolipm.utk.edu>) to reduce and balance risks from pests and pesticides. If a bed bug infestation is suspected, or if a number of students are bitten during class, the school should contact a pest management professional.

What if I find a bed bug on a student?

If a bed bug is found on a student, it may indicate that the student has bed bugs at home. However, bed bugs can crawl onto or off of a person (or their belongings) at any time, so it also is possible that the bed bug was brought to school by someone else. If a suspected bed bug is found on a student or a student's belongings, follow these procedures:

- Discreetly remove the student from the classroom so that the school nurse or other school-designated individual can examine — according to approved procedures — the student's clothing and other belongings. Any bugs found should be removed and collected for identification. Keep the specimens as intact as possible. The local Extension office (<https://utextension.tennessee.edu/Pages/offices.aspx>) or pest management professional can assist with identification.
- If a confirmed bed bug is found on a student, then the school-designated individual, such as school principal or nurse, should contact the student's parents or guardian to inform them of the bed bug presence on their child. Consider sending a bed bug inspection form home — a sample is provided at the end of this document. Educational materials, such as those available from UT Extension at <http://eppserver.ag.utk.edu/personnel/Vail/publications.html>, also should be provided to the family.
- The school-designated individual should consider notifying the affected class or classes. Notification of class members will be dependent on school procedures and if an infestation exists. A sample notification letter is provided at the end of this document.
- Students should not be excluded from school due to bed bugs unless repeated efforts have been made to remedy an infestation. Schools should not be closed due to bed bug presence. If pest management is necessary, it will normally be targeted to certain areas of the school.
- Ongoing pest management that includes the use of pesticides indoors should be performed by a pest

management professional under the direct supervision of a licensed operator.

What can I do to eliminate bed bugs from my classroom?

- Do not allow untrained staff to apply pesticides on school property. By law, only trained applicators under the direction of a licensed operator can apply pesticides (even ready-to-use products like sprays) in schools. Apply pesticides in compliance with the school's IPM plan.
- Inspect backpacks, lunchboxes and other items that travel back and forth to school daily. Seal these items in plastic containers to prevent bed bugs from getting into them at home.
- Clean hard surfaces with standard cleaning products.
- Reduce clutter and cardboard to decrease the number of hiding places for the bed bugs.
- If bed bugs have been found repeatedly in a particular classroom, have the room inspected by a pest management professional or other trained staff.
- Seek additional guidance if bed bugs are established.

What if one of my students has an infestation at home?

When a student is dealing with an infestation at home, it is important to be sensitive to his or her problem. Although bed bugs have nothing to do with cleanliness or socio-economic status, there is still a stigma that can come with having bed bugs. As a result, parents may be hesitant to admit to having bed bugs, and a student may not want others to know he or she has an infestation at home. A student living in an infested home also may feel anxious or tired during the school day.

Schools should work with the parents of any student living in an infested home to develop strategies for preventing the further spread of bed bugs.

- Determine if the infested home is being treated. Home remedies and do-it-yourself treatments are usually insufficient and could cause negative health effects or produce potential hazards in the home.
- If a parent lacks the financial resources to hire a pest management professional, he or she can reference online resources at <http://eppserver.ag.utk.edu/personnel/Vail/publications.html>.
- 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. Doing so prevents bed bugs from hiding in the clothing and being carried to school. Placing dry clothes (just prior to wearing) and other appropriate items into a clothes dryer set on one of the highest settings (>120 degrees F) for about 20

minutes should kill bed bug eggs, nymphs and adults. Observe closely to prevent shrinking or otherwise damaging clothing.

- Backpacks, lunchboxes and other items that travel back and forth to school also can be inspected daily and stored in sealed plastic containers at home to prevent bed bugs from getting into them.
- At school, consider providing the student with plastic bags or bins in which to store his or her things to prevent bed bugs from spreading to other students' belongings.
- If bed bugs are finding their way into the school, consider notifying the affected classes. A sample notification letter is provided at the end of this document.
- Continue to use these measures until successful treatment of the home has been verified.

Additional ways for schools to prepare for bed bugs

- Retain supplies to collect specimens and hold infested items: disposable gloves, trash and other sealable bags, plastic tarps, plastic storage bins and tape.
- Designate areas where potentially infested items can be held temporarily.
- Keep all "Lost and Found" clothing, backpacks, etc. in closeable plastic storage bins (rather than in cardboard boxes), preferably in a central location.
- Establish a list of primary school personnel who need to be aware of the situation immediately in order to address the problem and to deal with questions from parents, staff and potentially the news media.
- Educate the school community (teachers, staff, parents and others) about bed bugs and the system's response to bed bugs at the beginning of the school year. Plans should indicate what will happen if bed bugs are found in the school. For instance, if one bed bug is found on a child, the parent/guardian will be informed. If a room is found to be infested, the parent/guardian of all the students in the classroom will be informed.



Bed bugs behind baseboard.



Bed bugs bites.

photo credit, Suzan Jones, OSU

photo credit, Stephen Doggett, Westmeade Hospital

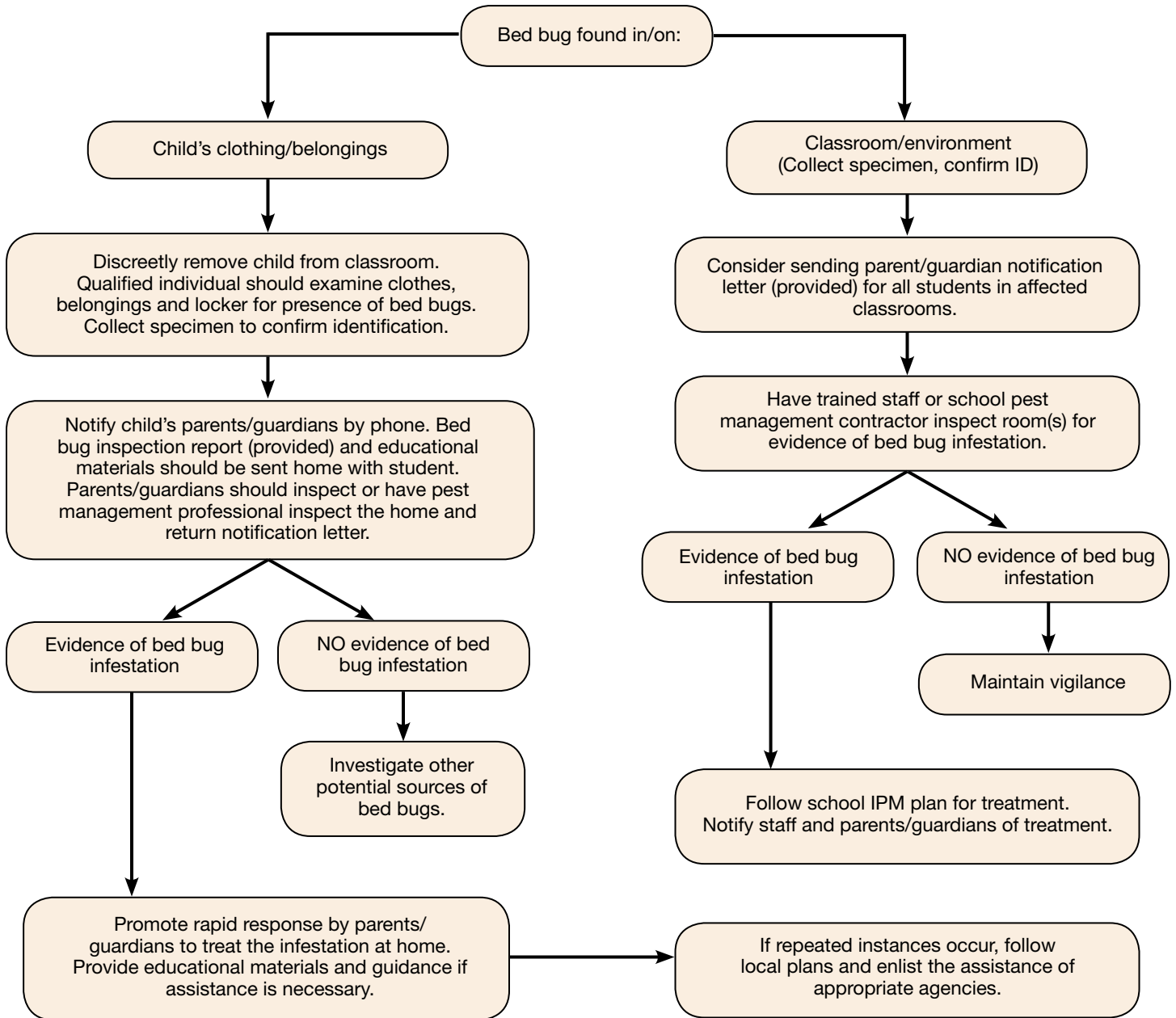
Bed Bugs: School Response Flowchart

School Responsibility:

Providing a healthy, pest-free environment in which students can excel.

Parent/Guardian/Caregiver Responsibility:

Providing a safe and healthy living environment for the student.



Note: Downloadable Microsoft Word Versions of this letter are available at http://schoolipm.utk.edu/success_results.html.

SAMPLE

**Bed Bugs Found in School: Parent Notification Letter
(To be sent home when bed bugs are established in a classroom.)**

(Use school letterhead)

Dear Parent or Guardian:

We have recently found a bed bug specimen in your child's classroom. Bed bugs are small insects that live by feeding on human blood, usually at night. The bite is painless and may or may not become swollen and itch, much like that of a mosquito bite. While bed bugs are a nuisance, they are not known to spread disease. If you have concerns for you or your child, you should call your family doctor.

The source of bed bugs often cannot be determined, as bed bugs may be found in many places. Even though it is unlikely for bed bugs to infest a school, (fill in your school district here) will conduct an inspection and, if necessary, the area where the bed bug is found will be treated. (Fill in your school district here) will continue to work to identify bed bugs and provide thorough inspections of schools.

If you have any questions regarding bed bugs within your school, please contact Principal (fill in principal's name and contact information here). If you have any questions regarding bed bugs found in your home, please contact your pest management professional or local county University of Tennessee Extension office, or see the UT's bed bug information (<http://eppserver.ag.utk.edu/personnel/Vail/publications.html>) and other comparable bed bug fact sheets.

Sincerely,

Principal or IPM Coordinator

Sample letter adapted from the Central Ohio Bed Bug Task Force

Note: Downloadable MS Word Versions of this letter are available at http://schoolipm.utk.edu/success_results.html.

SAMPLE

**Bed Bug Plan: Parent Notification Letter
(To be sent home at the beginning of the school year.)**

(Use school letterhead)

Dear Parent or Guardian:

Bed bugs are small insects that live by feeding on human blood, usually at night. The bite is painless and may or may not become swollen and itch, much like that of a mosquito bite. While bed bugs are a nuisance, they are not known to spread disease. A publication, "Bed Bugs: What Schools Need to Know" (http://schoolipm.utk.edu/success_results.html), describes the details of our bed bug management procedures. This letter outlines the steps we will take if bed bugs are found on school property.

If one bed bug is found on a child, the parent/guardian will be informed. A letter will be provided describing the role the parents should take in managing the situation. If a room, area or vehicle is found to be infested, a parent/guardian of the potentially affected students also will be informed.

The source of bed bugs often cannot be determined, as bed bugs may be found in many places. Even though it is unlikely for bed bugs to infest a school, (fill in your school district here) will conduct an inspection and, if necessary, the area in which the bed bug is found will be treated. (Fill in your school district here) will continue to work to find bed bugs and provide thorough inspections of schools.

If you have any questions regarding bed bugs within your school, please contact (fill in principal's or school's designee's name and contact information here). If you have any questions regarding the biology and management of bed bugs found in your home, please contact your local county University of Tennessee Extension office or pest management professional.

Sincerely,

Principal or IPM Coordinator

Sample letter adapted from the Central Ohio Bed Bug Task Force

Sample "Parent Bed Bug Inspection Report" for Schools

Dear Parent,

Today, a bed bug was found on your child or in your child's belongings. While this finding does not necessarily mean that the bed bug was brought to school by your child, it is important to your child's health and to the school community that you inspect your home for signs of bed bugs.

Enclosed you will find information about bed bugs and an identification guide to help you with your inspection. Once you have inspected your home, please fill out the form below and return to the school office by _____.

Sincerely,

School Administration

I have been informed that a bed bug was found on my child at school. I understand that bed bugs pose a threat to my child's well-being and to the greater school community. I have read and understood the educational materials provided to me regarding bed bugs, and I have:

- Carefully checked my family and home for signs of bed bug infestation myself.
- Hired a pest management professional to check my family and home for signs of bed bug infestation.

Name of parent/guardian: _____

Name of pest control company: _____

After completing a careful inspection, I certify that to the best of my knowledge:

- I or a pest management professional found signs of bed bugs in my home, and I will take the following actions to eliminate this infestation:

- I or a pest management professional did not find signs of bed bugs in my home at this time. If I find evidence of bed bugs in the future, I will notify the school immediately and take action to address the infestation.

I understand that bed bugs can be spread to other homes if they are brought to school in backpacks, clothing and other belongings. I understand that if bed bugs are repeatedly found on my child, that the school may take additional actions to protect the school community from bed bugs.

Signature _____ Date _____

Pest management professional's signature _____

This publication and the Spanish translations of the letters will be posted to the UT Child-serving Facility Integrated Pest Management (IPM) website, <http://schoolipm.utk.edu>.

This publication was reviewed/approved by the following Tennessee School IPM Advisory Board Members:

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This fact sheet was modified from Michigan Bed Bug Working Group's "Bed Bugs: What Schools Need to Know" (<http://tinyurl.com/24tlgrf>), and the "Sample Protocol for Bed Bugs Found in NC Schools" by the North Carolina School IPM Program, (<http://schoolipm.ncsu.edu/bedbugs.htm>) N.C. State University.

Precautionary Statement

To protect people and the environment, pesticides should be used safely. This is everyone's responsibility, especially the user. Read and follow label directions carefully before you buy, mix, apply, store or dispose of a pesticide. According to laws regulating pesticides, they must be used only as directed by the label.

Disclaimer

This publication contains pesticide recommendations that are subject to change at any time. The recommendations in this publication are provided only as a guide. It is always the pesticide applicator's responsibility, by law, to read and follow all current label directions for the specific pesticide being used. The label always takes precedence over the recommendations found in this publication.

Use of trade or brand names in this publication is for clarity and information; it does not imply approval of the product to the exclusion of others that may be of similar, suitable composition, nor does it guarantee or warrant the standard of the product. The author(s), the University of Tennessee Institute of Agriculture and University of Tennessee Extension assume no liability resulting from the use of these recommendations.

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