Louisiana Bed Bug Task Force





January, 2011

Managing Bed Bugs in Louisiana Hotels, Motels and Bed & Breakfasts

Louisiana and other states are experiencing an increase in bed bug infestations. Bed bugs are most commonly found in lodging establishments like hotels, motels and bed and breakfasts (B&Bs). Bed bugs feed on the blood of sleeping humans.

Bed bugs are a problem because once they are established in a room or other type of dwelling, they can be very difficult and costly to eradicate. Infestations are unlikely to go away by leaving a room unoccupied, and bed bugs can easily move through common walls or ceilings from an unoccupied room to guest rooms that are occupied.

This information is provided to help staff manage bed bug infestations and handle customer complaints. An important step in preventing bed bug infestations is to educate all staff and make pest management a routine part of every staff member's job.



What Are Bed Bugs?

Bed bugs are small, reddish-brown, wingless insects that feed on human blood. They are usually active at

night when people are sleeping. The adult bed bug is about the size of an apple seed and is big enough to be seen, but often hides in cracks and crevices in furniture, floors, and walls. When bed bugs feed, their bodies swell and become bright red. They can live for six to eight months without feeding.



What Does A Bed Bug Bite Feel And Look Like?

Most bed bug bites are initially painless, but later become red, itchy and swollen at the site of the bite. Bed bugs generally feed on exposed skin not covered by clothing. You will usually see three to four bites in a straight line or grouped together. Reactions to bed bug bites may occur immediately or up to 14 days after the bite.

Are Bed Bugs Dangerous?

Bed bugs do not transmit disease. In some cases, the bites can cause allergic reactions or become infected. The anxiety about being bitten can lead to sleeplessness, which can affect one's well-being.

How Do Hotels, Motels And B&Bs Become Infested With Bed Bugs?

In most cases, guests unknowingly carry in bed bugs in infested luggage, clothing, blankets and pillows. Bed bugs also can be brought in by other means, such as deliveries or by employees. Lodging establishments with high occupancy turnover are especially vulnerable to infestation. There is little that can be done to prevent guests from bringing in bed bugs. No lodging establishment is immune to a bed bug infestation. The presence of bed bugs is not an indication that a room has not been cleaned properly.

How Do I Know If A Room Has Become Infested With Bed Bugs?

Well-trained housekeepers are the staff members most likely to detect an early infestation. It is critical for establishments to look for the early signs of bed bugs using an inspection plan. Train staff to inspect rooms upon vacancy and whenever guests complain about bed bugs. Housekeepers should be encouraged to report any signs of bed bugs, and their vigilance should be praised and recognized even when they are mistaken. Remember, the goal is for your staff to discover bed bugs before your guests do!

What are some elements of a good inspection plan?

What to look for:

You will be inspecting for live or dead bed bugs, cast skins, eggs and fecal stains or droppings. In a light







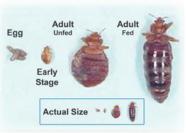




infestation, there may be little to see.

Bed Bugs: Live or Dead –

Live bed bugs may
be crawling around
their hiding places
or sitting quietly in a
crack or a crevice. Tiny,
newly hatched bed bugs
are beige and difficult to
see until they have had
a blood meal. As they
mature, bed bugs become
darker and easier to see on
light colored backgrounds.
Dead bed bugs are
frequently found near
sleeping areas.







Cast skins – After each blood meal, bed bugs molt and leave a shed skin behind. Bed bugs molt five times before they are fully grown. Shed skins look like empty shells of bed bugs. Skins are extremely light and will blow away at the slightest breeze.



Eggs - Although they are very tiny (about 1 mm long), bed bug eggs are white and will show up well in certain situations. They are more visible on dark backgrounds or smooth surfaces. Females have a tendency to lay eggs around their shelter or hiding areas. A cluster of eggs is a good indication that there

is a fertilized female nearby. Frequently, she will be hiding in a crack or crevice just out of sight.

Fecal Stains & Droppings - Droppings appear as small dark or black spots and are frequently the easiest to spot of all bed bug signs. A grouped arrangement of



droppings suggests a closer search of the area. Droppings may appear as solid blobs or as thin, ink-like stains. They can be seen as blood spots on sheets and pillows.

Where to look:

Bed bugs do a great job of hiding, so closely examine many areas of a room. Thoroughly inspect headboards, mattresses, bed frames, nightstands and upholstered furniture. Bed bugs also can be found behind baseboards and picture frames. You should begin your search for bed bugs in the high probability areas, normally within 15-20 feet of the sleeping area.

INSPECTION CHECKLIST:



✓ Beds: Look around headboards, mattress seams, box springs and bed frames. Also examine sheets, comforters, blankets and pillows.



✓ Upholstered Furniture: Look around the seams, edges of cushions and undersides of furniture.



Wood Furniture: Look at the undersides and interiors of dressers or chest of drawers. Remove drawers from furniture and check the inside, top and bottom, joints and even the heads of screws.



Wall Hangings and Baseboards: Look behind pictures, paintings, and mirrors and closely inspect baseboards and other cracks and crevices.

What Should I Do If I Find Bed Bugs?

Staff should immediately report signs of bed bugs to management.

At the first sign of bed bugs, the affected rooms should be immediately taken out of service and guests moved to other rooms. No one, not even housekeeping, should enter the room until it has been inspected by a pest management professional with experience in treating bed bug infestations. After a thorough inspection by a pest management professional, the room can be placed back in service if no bed bugs are found.

If the pest management professional finds evidence of a bed bug infestation in the room, then all adjacent rooms (both sides, above, below and across the hall) should be inspected. Make sure the rooms the guests are moved to are carefully inspected after guests leave, as bed bugs may have been carried into the rooms with their luggage.

Infested rooms should remain out of service until they have been successfully treated. Depending on the level of infestation, this may take several weeks and several visits from a pest management professional.

How Should Management Respond When Guests Complain About Bed Bugs?

Have a plan in place to address bed bug infestations as soon as they occur, and train staff accordingly. When guests complain, options could include:

- ▶ Immediately offer new rooms to the guests.
- ▶ Provide the guests a fact sheet about bed bugs.
- Reassure the guests that bed bugs are *not* known to spread disease.
- ▶ Offer to launder the guests' clothes. Potentially infested clothing and bedding should be washed separately in the hottest water and dried on the hottest cycle that is safe for the materials.
- Bring in a pest management company for a complete inspection and treatment of the room.
- ▶ Don't use the infested room until a pest management company determines the room is free of bed bugs.

Can Staff Use Pesticides to Control Bed Bugs?

Louisiana Pesticide Law prohibits lodging staff from using pesticides unless the employee is a certified pesticide applicator. Individuals who own, lease or rent a lodging establishment can make applications of non-restricted use pesticides. It is strongly recommended to seek assistance from a licensed pest management company that has experience in controlling bed bugs.

If You Use Pesticides - Read, Understand and Follow the Label.

Using the wrong pesticide or incorrectly using a pesticide can make you and others sick, and *it is a violation of federal and state law*. For a list of bedbug products registered by the Environmental Protection Agency (EPA) refer to EPA's website at http://epa.gov/pesticides/bedbugs.

- ▶ ONLY use pesticides labeled for indoor use.
- ▶ ONLY apply pesticides to sites that are listed on the label.
- ▶ DO NOT use bug bombs or foggers because they don't kill most bed bugs and can cause them to move to other rooms.

How Can A Lodging Establishment Prevent Bed Bug Infestations?

It is difficult to prevent bed bugs from invading lodging establishments. The best method to deal with bed bugs is Integrated Pest Management (IPM) which combines a variety of techniques and products that pose the least risk to human health and the environment. IPM uses information about the life cycle of pests and their interaction with the environment to utilize non-chemical and chemical management techniques.

These are some steps lodging staff can take to combat a bed bug infestation:

- ▶ Regularly monitor for bed bugs using the inspection plan mentioned in this document.
- ▶ Vacuum carpets, floors, bed frames, furniture and cracks and crevices daily. Use the nozzle attachment to reach all areas. Empty vacuum contents in outside trash receptacles.
- Seal mattresses and box springs with zippered covers. Use covers that are labeled for bed bug prevention.
- ▶ Seal cracks in walls and wooden floors.
- ▶ Remove clutter where bed bugs can hide.
- ▶ Wash and dry bedding and clothing at high temperatures (120 170 degrees Fahrenheit).
- ▶ Don't furnish your hotel, motel or B&B with used furniture because these may contain bed bugs.
- ▶ Choose light-colored bedding—this makes it easier to see bed bugs and blood spots and fecal stains.
- Choose bedding that does not hang down to the floor.
- ▶ Keep used bed linens in a sealed plastic container to prevent bed bugs from spreading to clean linens.
- ▶ Do not bring housekeeping carts into rooms. This will lessen the chance of spreading bed bugs from room to room.
- ▶ Choose furniture of plain design. A metal chair offers fewer places for a bed bug to hide than a wicker chair.
- ▶ Have a licensed pest professional provide regular pest management services to help find and eliminate bed bug infestations as early as possible.
- Many pest management professionals can help train hotel staff to provide early detection of bed bug infestations.

How Should I Choose A Pest Management Company?

Professional assistance is usually necessary to successfully rid a property of bed bugs. Use dependable referrals, directories, and professional associations to find a properly licensed pest management company with experience treating bed bugs. The Louisiana Department of Agriculture and Forestry Structural Pest Control Commission permits businesses and licenses applicators that perform structural pest control work in Louisiana. Structural pest control is also referred to as pest management.

- ▶ Interview several companies before choosing. Ask about their training and their approach to controlling bed bugs.
- ▶ Agree on a service plan and its cost. Expect at least two treatment visits and a third follow-up visit to confirm that bed bugs have been eliminated. Severe infestations may take more visits to eliminate bed bugs.

A good company will...

- ▶ Inspect your property before giving you a price quote or beginning any pesticide application.
- ▶ Give you a written inspection report and an action plan of how to prepare for treatment and prevent further infestation.
- ▶ Base quotes on inspection findings, not flat fees.
- ▶ Visit often, until the job is done.
- Employ qualified, well-trained pest management professionals.
- ▶ Educate you and your staff on how to prevent bed bugs.
- Work with you until the servicing is complete and the bed bugs are gone.
- Provide an option for ongoing inspection and control services for your establishment.

For additional information or to contact a specialist:

Kyle Moppert

Medical Entomologist
Louisiana Department of Health and Hospitals
Kyle.Moppert@la.gov
225-342-7551

Gregg Henderson

Professor of Urban Entomology LSU AgCenter grhenderson@agcenter.lsu.edu 225-578-1831

Central Ohio Bed Bug Task Force: http://centralohiobedbugs.org/index.html

Environmental Protection Agency http://epa.gov/pesticides/bedbugs

Louisiana Department of Agriculture and Forestry: http://www.ldaf.la.gov/portal/Offices/ AgriculturalEnvironmentalSciences/ PesticideEnvironmentalPrograms/tabid/118/Default.aspx

Louisiana Department of Health and Hospitals Office of Public Health: http://www.dhh.louisiana.gov/offices/page.asp?id=205&detail=6679

LSU AgCenter: http://www.lsuagcenter.com/en/environment/insects/household/Bed+Bugs.htm

National Center for Healthy Housing: http://www.healthyhomestraining.org/ipm/NCHH Bed Bug Control 2-12-10.pdf

Michigan Department of Community Health/ Bed Bug Working Group http://michigan.gov/emergingdiseases/0,1607,7-186--147759--,00.html

New York City Department of Health and Mental Hygiene http://www.nyc.gov/html/doh/html/vector/vector-faq1.shtml

Contents on this fact sheet were reprinted with permission from the Michigan Department of Community Health / Bed Bug Working Group, the Central Ohio Bed Bug Task Force, and the New York City Department of Health and Mental Hygiene.

Page	Image Description	Image Credit
Page 1	Bed bug	U.S. Centers for Disease Control and Prevention
Page 1	Bed bug bites	Stephen Doggett, Department of Medical Entomology, ICPMR, Australia
Page 2	Bed bug stages	Stephen Doggett, Department of Medical Entomology, ICPMR, Australia
Page 2	Large group of bed bugs	A.L. Szalanski, 2007 (Creative Commons)
Page 2	Cast skins	H. Harlan – Armed Forces Pest Management Board
Page 2	Eggs	H. Harlan – Armed Forces Pest Management Board
Page 2	Bed bug fecal stains	Cuttlefish on Flickr
Page 2	Mattress seam with thumb	Stephen Doggett, Department of Medical Entomology, ICPMR, Australia
Page 2	Mattress seam	M. Sheperdigian – Rose Pest Solutions
Page 2	Bug inside wooden Drawer	Lou Sorkin – American Museum of Natural History
Page 2	Bed bugs behind baseboards	Ohio State University Extension Entomology