



File Name: Cornell university bed bug manual.pdf

Size: 1578 KB

Type: PDF, ePub, eBook

Category: Book

Uploaded: 28 May 2019, 19:12 PM

Rating: 4.6/5 from 811 votes.

Download Now!

Please check the box below to proceed.



I'm not a robot



reCAPTCHA
Privacy - Terms

Book Descriptions:

Cornell university bed bug manual



Checking your browser before accessing This process is automatic. Your browser will redirect to your requested content shortly. You may have to register before you can post click the register link above to proceed. To start viewing messages, select the forum that you want to visit from the selection below. This is one of the most comprehensive assemblies of informational links we have seen and we bring this to you as part of BedBug Centrals mission of being the Authoritative Source for Information. Missouri Video lengthy on Hotel Bed bug Checks Bed Bug Hotel Safety Tips from Rand McNally Bed Bug Registry for Guest Hotel Reports BedBug Reports Website for Guest Reports on Hotels Bed Bug Infestation Maps by State Bed Bug Hotel Search or File Hotel Reports Find a bedbugFREE company near you. Bed bugs are suspected to carry leprosy, oriental sore, Qfever, and brucellosis Krueger 2000 but have never been implicated in the spread of disease to humans Dolling 1991. After the development and use of modern insecticides, such as DDT, bed bug infestations have virtually disappeared. However, since 1995, pest management professionals have noticed an increase in bedbugrelated complaints Krueger 2000. Photograph by Joseph Smith, University of Florida. Bed bugs are not evenly distributed throughout the environment but are concentrated in harborages Usinger 1966. Within human dwellings, harborages include cracks and crevices in walls and furniture, behind wallpaper and wood paneling, or under carpeting Krueger 2000. Bed bugs are usually only active during the night but will feed during the day when hungry Usinger 1966. Bed bugs can be transported on clothing, and in luggage, bedding and furniture USDA 1976. Bed bugs lack appendages that allow them to cling to hair, fur, or feathers, so they are rarely found on hosts Dolling 1991. The leathery, reduced fore wings hemelytra are broader than they are long, with a somewhat rectangular appearance. http://rodosgrand.com/userfiles/financial_planning_association_compliance_manual.xml

- **cornell university bed bug manual, cornell university bed bug manual 2017, cornell university bed bug manual pdf, cornell university bed bug manual download, cornell university bed bug manual free.**



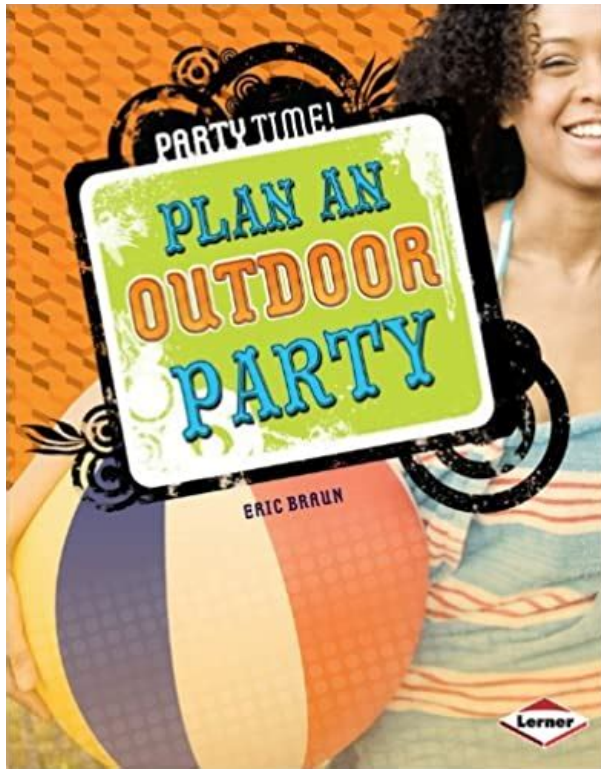
The sides of the pronotum are covered with short, stiff hairs Furman and Catts 1970. Before feeding, bed bugs are usually brown in color and range from 6 to 9.5 mm in length. After feeding, the body is swollen and red in color USDA 1976. Photograph by David Almquist, University of Florida. Photograph by Joseph Smith, University of Florida. Photograph by Joseph Smith, University of Florida. These two species of bed bugs can be easily distinguished by looking at the prothorax, the first segment of the thorax. The prothorax of the common bed bug is more expanded laterally and the extreme margins are more flattened than that of the tropical bed bug Ghauri 1973. The female possesses a secondary copulatory aperture, Ribagas organ or paragenital sinus, on the fourth abdominal sternum where spermatozoa from the male are injected. The spermatozoa then migrate to the ovaries by passing through the haemocoel, or body cavity Dolling 1991. The female bed bug lays approximately 200 eggs during her life span at a rate of one to 12 eggs per day Krueger 2000. The eggs are laid on rough surfaces and coated with a transparent cement to adhere them to the substrate Usinger 1966. Within six to 17 days bed bug nymphs, almost devoid of color, emerge from the eggs. After five molts, which take approximately ten weeks, the nymphs reach maturity USDA 1976. However, when bed bugs are numerous, a foul odor from oily secretions can easily be detected USDA 1976. Other recognizable signs of a bed bug infestation include excrement left around their hiding places Dolling 1991 and reddish brown spots on mattresses and furniture Frishman 2000. Good sanitation is the first step to controlling the spread of bed bugs. However, upscale hotels and private homes have recently noted infestations, suggesting that good sanitation is not enough to stop a bed bug infestation Krueger 2000. The effectiveness of using steam cleaners or hot water to clean mattresses is questionable. <http://www.sarkar.ie/userfiles/financial-management-training-manual-pdf.xml>



Heat is readily absorbed by the mattress and does no harm to the bed bug. For severe infestations, however, pesticides may be used. Care should be taken not to soak mattresses and upholstery with pesticides. Allow bedding and furniture to dry thoroughly before using. One study shows that

overthecounter foggers are not effective for controlling bed bugs Jones and Bryant 2012. Pesticides Controlling Pests. 26 April 2017 Pest Control 68 24. National Press Books, Palo Alto, California. British Museum, London, England. Journal of Economic Entomology 105 936942. Pest Control 68 5864. Cornell University Press, Ithaca, New York. Entomological Society of America, College Park, Maryland. Latest revision June 2014. Reviewed April 2017. In multifamily housing units, bed bugs spread by moving from one apartment to another, by bed buginfested furniture being brought into theIf you suspect a bed bug infestation, save the insect in a vialYou can submit a complaint by calling the Housing and CommunityThey can hide inside of anything and may survive without feeding for one year. Do not assume that they are gone until eight weeks have passed since the last bite. The following stepsThese doityourself steps can be paired up with a comprehensive bed bug control program that includes residents, landlord, and a commercial pest control contractor. Take the bed completely apart. Clean and vacuum all folds of the mattress and box spring with a stiff furniture brush and crack and crevice tool. Treat the bed with a pesticideAfter cleaning and treatment, cover the mattress and box spring with bed bug proof encasements sold at retail stores and online. Make sure that nothing on the bed is touching the floor e.g. blankets, bed skirts, etc. besides the legs of the frame. Traps will also help you judge how well the control effort is working. Female bed bugs glue their eggs in hidden areas, making it difficult to remove 100% of them with a vacuum cleaner.

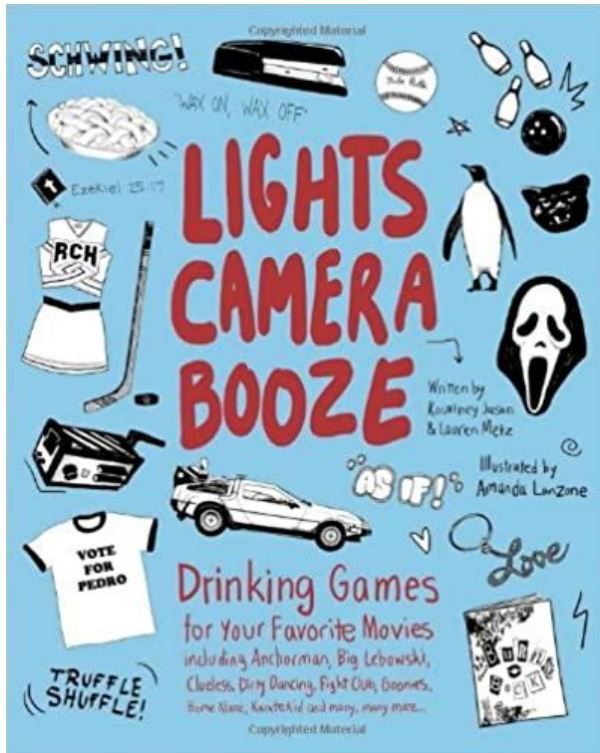
Move and scrape the crevice toolHeavily upholstered furniture that has a lot of folds, ruffles, buttons, etc.This type of furniture may need to be discarded. Remove clutterRubbing alcohol will kill bugs on contact, but it isUnwashable items may be treatedDry cleaning chemicals also kill bed bugs. It kills all stages of bed bugs. Be sure to wear gloves when using pesticide and always follow the directionsA mosquito bed net or a small, finely screened tent set on topIt is always the pesticide applicators responsibility, by law, to read and follow allNo endorsement is intended for products mentioned, nor is criticism meant for products not mentioned. The author and the Allegheny County Health Department assume no liability resulting from the use ofBed Bugs in MultiFamily Housing A Guide for Landlords Guide to Bed Bugs from University of Kentucky. They do not spread disease. They have become increasing common in Onondaga County and throughout the United States in recent years. This video from the American Academy of Dermatology shows how to find bedbugs before they find you and your belongings. There are stepbystep instructions to guide the user through all phases, and reduce the potentially dangerous, expensive and in effective control options, as well as a photo gallery and a section on debunking the myths. Bed bugs are not known to transmit diseases to humans, but their bites can cause local irritation or allergic reactions. IUEHS has developed inspection and response protocols to effectively address bed bug problems that may arise in University facilities. Closeup of an adult bed bug. Photo Credit Piotr Naskrecki, via Wikimedia Commons Contacts Graham McKeen Will Clagett Shelby Patterson Bed Bug Basics Identification, Prevention, and Treatment What are bed bugs. Bed bugs are a reddishbrown type of wingless insect, found worldwide, that feed off the blood of humans and other mammals such as birds and bats. They are not known to transmit diseases to humans.



<http://www.raumboerse-luzern.ch/mieten/boss-dr-770-manual-download>

Bed bugs belong to the Order Hemiptera and Family Cimicidae, which has over 90 species around the world and 15 in North America. The common bed bug *Cimex lectularius* is a pest of humans that has recently become a problem in the United States and countries all over the world. Bed bugs have three basic life stages; egg, nymph, and adult. They begin as a very small but visible egg, hatch to become a first instar nymph or juvenile, which is 1 millimeter long or about the size of a poppy seed. There are five juvenile stages, which feed on blood, molt and grow over time. The adult is about the size of an apple seed. Bed bugs tend to gather together in hidden and undisturbed places where a person sleeps, or sits for an extended period of time. They are usually found in the bed, along the seams and sides of the mattress and box spring, the headboard, and bed frame, creating clusters of live bed bugs, shed skins, darkcolored fecal spots, and eggs. In heavily infested locations bed bugs can be found anywhere in the room. As bed bugs grow they shed their ambercolored, transparent skins, leaving behind what look like hollow bed bugs. A fecal spot, the result of bed bug digestion, may look like a brownishblack bump on a hard surface, or a dark stain like a magic marker dot on fabric. Eggs are cemented to fabric, wood, paper, and most other surfaces as the female hides or wanders in search of a host. Bed Bug Identification Bed bugs are small but visible insects. The newly hatched nymph is very pale until it feeds. Then it looks like a tiny droplet of blood. Each nymph stage will feed and become filled with red blood. The adult is about the size and shape of an apple seed, and dark red to brown in color and as flat as a credit card before feeding. The first sign of a bed bug infestation is usually the appearance of bites on the arms, neck, torso, or legs. One may also find live or dead bugs. Collect a sample for positive identification.

<https://elitesoftsolutions.com/images/8485se-manual.pdf>



Clusters of small stains or droplets of dried blood on furniture and bedding may also be found. These stains are the bed bugs' fecal droppings. They may be accompanied by shed skins, because bed bugs shed their outer skin, or molt, as they grow. Shed skins are amber in color and resemble the shape of a bed bug. There may also be live bugs and eggs where droppings are found. DON'T mistake bed bug droppings for cockroach droppings. Cockroaches leave behind tiny rectangular pellets, not round droplets or stains. There may also be rectangular egg cases or dead cockroaches nearby. When searching for bed bugs it is important not to overlook the nymphs, which can be difficult to spot. Look for nymphs where droppings and stains appear, especially in crevices on fabric and wood surfaces. Bed Bug Bites Often, the only sign of bed bug problems that you may notice is bites. Red itchy welts are an indication of an infestation. Bed bugs "bites" occur when the bed bug is actually drawing blood. Saliva that is injected during the bite can produce swellings on the skin that may itch and become irritated and infected when scratched. It may take as long as 14 days for a welt to appear from a bed bug "bite." Common areas on the body that are affected involve the arms and shoulders. For the most part, bed bugs only feed in the dark. During the day they hide in dark cracks or crevices. Bed bugs are not known to transfer disease. However, individuals may react differently to bites. Bites may cause allergic reactions or exacerbate asthma symptoms in susceptible individuals. Usually the first sign of a bed bug infestation other than bites is the appearance of small rusty spots on your mattresses and bed linens. These are bed bug droppings and blood spots. There may be an offensive sweet odor in rooms with heavy infestation. At first, bed bugs are likely to be found only on the tufts, seams and folds of mattresses and daybed covers; later they spread into crevices in bed frames.

<https://fiaxell.com/images/848p-a-user-manual.pdf>



Once they multiply, they may be found in baseboards, window and door casings, pictures and picture moldings, loosened wallpaper, cracks in plaster and partitions, and in furniture such as couches and stuffed chairs. How are bed bug spread and who is at risk of getting them. Bed bugs may be found in homes, motels, hostels, movie theaters, transportation depots, and rest rooms. They may be accidentally moved with clothes, suitcases, furniture, and other personal items. Bed bugs may also be transported in secondhand or rental furniture. Bed bugs do not fly or jump, but they move quickly over floors, walls, ceilings, and furniture. Anyone who comes in direct contact with bed bugs can carry them into their homes in clothes, second hand beds and bedding, furniture, or suitcases. Infestations are not tied to unsanitary living conditions. Even worldclass hotels have reported bed bug problems. Bed Bug Inspection Process A thorough inspection is important to determine how widespread the infestation is and the best way to manage bed bugs. Adult bed bugs can hide in any spaces as thin as a piece of paper. Young bed bugs are even smaller. When conducting an inspection, move slowly and avoid disturbing hiding bugs, so they don't scatter. Keep in mind that in a low infestation, the bed bugs will be concentrated close to sleeping areas. Items away from the sleeping area will be at a low risk of infestation. Prioritize the risk of infestation from high to low to concentrate inspection and treatment time to the most infested areas. Look first before touching to avoid injury from hidden sharp objects.

The recommended inspection tool kit includes Magnifying glass Strong flashlight Plastic ziptop bags for collecting specimens A probe, such as a "credit card tool", made by cutting any plastic card into a long triangle, for checking in narrow spaces Pyrethrin or compressed air for cleaning computers for flushing bedbugs from cracks and crevices Screwdrivers for removing light switch and electrical plates Other tools a small tool kit for disassembling furniture Alcohol, glasscleaning or baby wipes, for evidence that stains are bed bug droppings Cotton swabs for checking stains in crevices Sticky traps may be useful if placed under the bed and checked regularly Signs of bed bugs Live bed bugs of all sizes poppy seed to apple seed size Confirm that what you find is a bed bug Droppings in the form of dark colored stains on cloth or bumps on hard surfaces Shed skins Eggs, although very small, will be found among droppings or in crevices where adults hide Inspecting the bed Inspection for bed bugs starts in the place where people sleep and moves out from there to other parts of the room. This should be conducted before room preparation steps are taken. Mattress inspection Along the top and bottom seams, and along each side of the piping material sewn onto these edges Under mattress handles and along or inside air holes Between the mattress and box spring, platform or frame Inside folds of material and under buttons If mattresses are covered in vinyl plastic, look inside seams and rips in material. Use alcohol or baby wipes to rub suspected bed bug droppings. If the spots dissolve into a reddish brown color, this could indicate bed bug droppings and should be a reason to continue inspecting until a live bed bug is found.

<http://mesotects.com/wp-content/plugins/formcraft/file-upload/server/content/files/16285a371c7fe6--c-130-cargo-loading-manual.pdf>

Box spring inspection Points where the box spring sits on the bed frame, lift slowly to avoid scattering bed bugs The top surface of the box spring, inside folds of material Along seams and

where the material is tacked to the frame Turn over the box spring and remove the thin cloth layer on the underside. Use a flashlight, a hand lens and a crevice tool to check the spaces between box spring frame parts. Look around and beneath furniture staples and tacks. Use a flushing agent to chase bed bugs out of hiding spots. Double faced tape or carpet tape can be placed on the underside of furniture to capture wandering bed bugs. This is a monitoring tool, not a control strategy. Bed frame and headboard inspection Wood beds especially captain's beds and head boards especially wicker are preferred hiding spots for bed bugs over metal bed frames, but bed bugs will hide in crevices on metal and plastic, or where a mattress touches a metal frame. Visually inspect and use the crevice tool in all joints of the frame where parts meet. Turn the frame over and inspect from the underside. Check screw and nail holes for bed bugs. Take the bed apart to check between parts. Remove the headboard from the bed and check for bed bugs along the joints and on the wall behind it. Wicker furniture provides infinite hiding spots for bed bugs. Anything made of wicker should probably be discarded properly. Inspecting other furniture and storage areas Furniture, such as night stands, will be likely places to find bed bugs, since they can easily crawl to distant hiding spots. As the bed bug population grows, overcrowding may cause them to wander. Furniture near the bed can become infested and infestation can quickly spread away from the bed if no control measures are taken. Empty drawers and shelves of the furniture closest to the bed. Place items into plastic bags to be inspected and cleaned.

www.cutsky.com/d/files/colorado-accommodations-manual.pdf

Pull out drawers and inspect every corner and the undersides, using the crevice tool to check under the metal drawer guide. Use the crevice tool to inspect gaps wherever the tool will fit, such as between the shelf and bookcase frame. Turn over all furniture to inspect the underside. Be sure to inspect screw and nail holes. Plastic and metal furniture may harbor bed bugs, follow the same inspection procedures. Electronics, such as lamps, remote controls, alarm clocks, and radios should be placed into plastic bags for further inspection. If bed bugs are found in the frame of the furniture where the radio or clock sits, further inspections of those items and possible treatment are warranted. Officestyle chairs should be inspected by turning them over and looking under seams where fabric attaches to the frame. Also check screw holes. Plush furniture, such as a couch, will harbor bed bugs, even if residents are not sleeping there. In these cases, inspection will be more difficult due to the many inaccessible hiding spots. Inspect pillows and cushions, particularly the seams and the folds around zippers. Look at and under legs of chairs and couches. Turn over the furniture and remove the thin cloth backing under each piece. Pay special attention to staples and where material is stapled to the frame. Look inside at all wood parts of the frame. If the piece is highly infested, consider disposing of it in a proper manner see below for furniture disposal guidelines. Inspecting the room perimeter Once established, bed bugs will spread toward the perimeter of the room, including walls, moldings, and rugs. Look at moldings or the joint between the floor and wall closest to the bed. Use the crevice tool to check behind moldings. The tool will chase bed bugs out of hiding if used in a sweeping upward motion. Fold back the edges of wallto wall carpets to inspect for signs of bed bugs. Pay attention to the tack strip of carpets. Look under the edges of area rugs.

Using a screwdriver, remove electrical switch and outlet, and phone jack plates to inspect. If bed bugs are hiding in these areas, signs may be evident along the edges and on the back of the plate. Inspect everything hanging on the walls. If framed art or photos are present and there is evidence of bed bugs nearby, open the frame to inspect inside or under the paper backing. Check under loose wallpaper and areas of peeling paint. Take down curtain rods and inspect inside them and underneath hardware on the walls. Look at closet, bathroom and other door frames, along hinges, and in the bore hole for the latch on each door. Make a note if bed bugs are found on walls. Ceiling lights and fixtures with bed bugs could indicate that they are moving from the upper floor unit. If

bed bugs are on walls, they may hide under ceiling moldings and in smoke detectors. Inspecting unusual locations Bed bugs may turn up in unexpected places in moderate and large infestations. If the infestation is large, every object in the affected area should be carefully inspected. Reduce the amount of clutter to achieve a good treatment and eliminate hiding places. When returning from a trip, inspect your luggage and clothes for bed bugs. Brushing, vacuuming and steam cleaning of infested mattresses and pillows are effective in killing bed bugs living in seams and buttons. Vacuum around the home at least once a week, paying special attention to areas surrounding bed and furniture posts. Dispose vacuumed contents in a sealed plastic bag. Cover mattresses with cotton covers and box springs with plastic covers. Put clothing in a dryer on high heat for 30 minutes. Ensure that the residence keeps a pest management professional on contract. Inspect any room you're about to inhabit while traveling. Caulk holes in floors and walls.

Evidence of rusty colored spots on bedding could mean an infestation is present Preventing bed bugs can be difficult, especially in residences that have many cracks and crevices, or loose wallpaper. Indirect measures can go a long way in controlling bed bugs wash bedding and mattress pads, steamclean mattresses, and clean furnishings. Prevent bed bugs from getting into residences by removing debris from around the house, repairing cracks in walls, and caulking windows and doors. Simple methods include coating the legs of beds with petroleum jelly or doublesided tape so bed bugs will not be able to climb onto the bed. Putting the legs of the bed frame in empty cans or glass jars also help since bed bugs cannot fly or jump. Avoiding Bed Bugs While Traveling Always inspect before settling into any room. Pack a flashlight even the keychain LED variety and gloves to aid in your inspection. The inspection should focus around the bed. If you're traveling alone, someone on staff should help. After checking the headboard, check sheets and pillows for blood spots. Next, pull back the sheets. Check the piping of the mattress and box spring. Finally, look in and under the drawer of the bedside table. If all these places are clear, enjoy the night. The next morning, look for blood spots on the sheets—bed bugs poop soon after they feed. If you find evidence, but no live bed bugs, the evidence may be old and doesn't mean that the hotel is dirty. Tell the front desk discreetly what you found and ask for another room—one that doesn't share a wall with the room you just vacated. Bed bugs are a PR nightmare for the hospitality industry. If you run to a competitor who's just as likely to have bed bugs it makes it less likely that the industry will become more open about this issue. Communication is key. Ideally hotels and motels would pride themselves on their bed bug programs and show customers how to inspect to keep all parties bed bug free.

If you can avoid it, don't unpack into drawers, and keep luggage closed on a luggage rack pulled away from the wall. Never set luggage on the bed. Download and print a copy of NYS IPM's Traveler Tips. If you think you have been to a place that has a bed bug problem, follow these steps when you return Launder your clothes before or as soon as these items are brought back into the home. Launder on hot water cycle or high heat dry 120 degrees F for 30 minutes. If you found bed bugs after moving into a hotel room, you could ask the hotel to pay for laundering—and for steamcleaning your luggage. The hotel may refuse, but it's worth asking. Regardless, once home you should unpack on a floor that will allow you to see bed bugs—stay off carpets. Unpack directly into plastic bags for taking clothes to the laundry. Suitcases should be carefully inspected and vacuumed if you suspect that your items have been exposed to the bugs—suitcases can also be laundered, placed in a freezer for 24 hours, or heat treated in IU's heat chamber. It's less likely but still possible that a bed bug would travel on you or the clothes you are wearing. People typically move too much to be a good hiding place. Bed bugs are more likely to be spread via luggage, backpacks, briefcases, mattresses, and used furniture. Residential Infestation Elimination and IU Employees Complete elimination of a bed bug infestation may be difficult without the services of a knowledgeable Pest Control Service. It may even take as many as five or more treatments to gain control of an infestation. Do it yourself measures used by homeowners and renters sometimes cause more problems than benefits. Employees should notify management when they have a current infestation in their home. Employers

should request documentation showing treatment has occurred. Follow up inspections and monitoring at the employees home should also occur to prove successful eradication.

Employees and employers may consider the following depending on the severity of the infestation and the job duties of the employee. The employee can dry a change of clothes on high heat for about 30 mins, place them in a sealed ziplock bag. Bring them to work and change into the sealed clothes. They can then place the clothes they brought into the sealed bag and dry them upon returning home. Items like shoes can also be placed in the dryer on high heat. Minimize what the employee brings to work. Only bring items necessary to perform the job. To reduce the chance of spreading bugs elsewhere on campus, the employee may avoid large common areas or housing areas while working until the infestation is under control. The employee could avoid wearing pants with cuffs or open-toed shoes which may allow for hitchhiking bugs. They can hang up coats and bags and store items brought from home elevated and away from the walls. The employer could arrange for increased vacuuming in the areas where the employee works. Clutter can be reduced in the employees work area. Monitoring could be established by the employer through Building Services, their contracted Pest Management Professional, or IU's Office of Environmental Health and Safety Management.

Avoiding Transfer of Bed Bugs When Moving Indiana University discourages moving individuals during a bed bug infestation. However, there may be good reason to move them to a different area or residence while the infested one is treated. Bed bugs may be transferred with personal belongings, causing more trouble in the new living space. Some suggestions for moving to a new location without bringing bed bugs are as follows. Place all belongings in clear plastic bags that are sealed tightly. Sort items by type clothes, towels, sheets and blankets and keep things that are known to be infested away from clean items.

Have each individual shower and change into clean clothing and shoes and bag up the current possibly infested clothes for laundering. Educate the resident about protecting themselves from bed bugs and what to look for using fact sheets from this guidance. Before personal belongings can be accessed in the new home, they MUST be bed bug free, or the process will be repeated. Provide or obtain access to laundry. Follow all laundering and cleaning steps for personal belongings. Keep items that cannot be sanitized inside clear plastic bags electronics, appliances, books, etc. and ask a professional pest manager how these items should be treated. Provide vinyl or bed bug proof covered mattresses for the beds of each member of the residence. Also cover box springs if they are present. Provide contact information for a person who will respond to bed bug complaints, in case bed bugs show up again. Whether you move permanently or temporarily, leave furniture behind if possible to allow it to be treated. Treat furniture before moving it. Take with you as few items as possible at first. Housekeeping for Bed Bug Control Thorough cleaning, in the form of vacuuming and washing floors and furniture, is an essential step in bed bug and cockroach control. Cleaning, alone will not eliminate bed bugs but is necessary to crash high populations. Cleaning removes debris that may contribute to allergies and asthma, and removing bugs, droppings, and cast skins allows the inspector to spot new activity. Vacuuming does not easily remove eggs and bugs hiding in cracks but can pick up bugs and cast skins in easily accessible areas. In places, such as dorms, cleaning teams or the facility management may be responsible for the majority of housekeeping duties. Cleaning for bed bugs should focus on sleeping and lounging areas, whereas cockroach control depends on sanitation in cooking and eating areas.

<http://afreecountry.com/?q=node/4366>