

Bed bugs have become an increasing problem nationwide. The increase is believed to be due to the discontinued use of the toxic chemicals which are needed to control them. Current measures are effective, but must be followed judiciously. When a room is infected, the whole room must be treated. In addition adjacent rooms must be inspected, and possibly treated. Clutter in a room provides more places for these insects to hide. Although bed bugs do not carry disease, they are still unwelcome visitors that are difficult to eradicate. Multiple inspections and treatments may be necessary for complete extermination. A coordinated effort within the university community is most effective in dealing with this issue.

#### Response to a potential bed bug problem:

Residents who have questions or concerns about bed bugs should be directed to the Work Request Office (815-753-4948). This office will be the central point of contact for residents, parents, and staff involved in the treatment process.

- 1. Upon receiving a call about bed bugs, the Work Request Office staff will ask specific questions and document the answers on the Insect Evaluation Questionnaire to help determine whether the pests are bed bugs. Bed bugs are very difficult to diagnose because of the type of bites and the size of the pest. (see Insect Evaluation Questionnaire page 4.)
- 2. After speaking with the resident, the Work Request Office will fill out the Integrated Pest Management form and fax it along with the Questionnaire to EHS at 753-6294 to report the problem.
- 3. EHS will call the resident directly to schedule an inspection of the room.
- 4. Once the inspection is complete and it is determined that the room needs to be treated, the treatment protocol will be given to the resident. The initial treatment date will then be scheduled.
- 5. The room being treated will need to be prepared for the treatment (see NIU Bed Bug treatment instructions, pg 6)
- 6. When treatment is complete a note will be left in the room with the date for the next treatment. EHS will call the day before a treatment to remind the residents.
- 7. Inspection and treatment verification will be maintained by EHS. The potential bed bug issue will then be entered onto a spreadsheet which is located in a shared folder (between EHS and Housing Facilities).
- 8. Follow up and treatment will be coordinated by EHS.
- 9. If the bed bugs have not been eradicated after the third treatment and it is found to be due to the students not preparing the room as described in the bed bug response policy, the Residential Communities staff will be brought in to treat the situation as a behavior incident and dealt with accordingly. In addition, other departments will be consulted and considered part of the bed bug response team that is dealing with this pest issue.

#### **Identify and Respond to Bed Bugs**

Bites in a line may be the only initial indication that a room has bed bugs. They are elusive and can easily hide in very small places as well as on mattresses. For this reason, all requests will be



investigated. Information in the Questionnaire will be reviewed. It is important that the residents work with EHS so that effective treatment can be provided. ALL residents of a room will need to comply. (See Treatment Protocol.)

- Residents will not be moved to another room because of infestations. This only spreads the problem.
- Housing & Dining does reserve the right to move a roommate of the resident with bed bugs, based on the individual circumstances.
- > Initially room changes should be done on a temporary basis, with the resident only taking essential items to temporary room.



## Treatment Protocol for Bed Bugs Northern Illinois University

#### **Treatment Process**

#### **Step 1: Inspection**

- 1. Once an area has been identified as a potential problem, a certified Pest Control Technician will inspect the area. A thorough inspection of the room will include, but not be limited to, the mattress, bed frame, closet, desk, clothing, and any luggage. This investigation may require several hours as bed bugs are difficult to locate.
- 2. If bed bugs are not found, the area may be treated for any other pest problems that are identified. As with any health issue, residents should see a physician if they continue to experience a skin outbreak.

#### **Step 2: Pretreatment preparation**

- 1. All residents of the room being treated must prepare their portion of the room. The entire room must be prepared, not just the side of the room of the resident who called the WRO.
- 2. Remove all bedding from bed, place in bag. Remove all clothing from closets, drawers, under the bed, and off the floor, place in bags. All bolsters must be emptied, and items placed in bags. All items must be removed from under the bed and items placed in bags. All bags must be placed in middle of room. This includes backpacks, coats/jackets, caps & hats, and shoes.

#### **Step 3: Treatment**

- 1. All floors must be cleared of any personal items in preparation for treatment.
- 2. Based on the inspection, the mattress will either be treated or removed in a sealed plastic bag.
- 3. Inspection and potential treatment may include rooms immediately surrounding (including above, below, left, right, and across) the target room. This is a precautionary technique and residents in these rooms are not required to follow the laundry recommendations unless they too have signs of the target pest.
- 4. Treatment of infested areas may take more than one application. Follow-up inspections may be necessary.

#### **Step 4: Post Treatment**

1. All clothing and bedding should be laundered. Water soluble laundry bags are available. Clothes can be placed in these bags and the bag with clothing laundered. Upon completion of the cycle, the bag will not be present because they dissolve. (They do not harm clothing)Please contact the Work Request Office for the water soluble bags. If it is not possible to launder items they can be put in a hot dryer for 30 minutes. After cleaning, **ALL laundry** should be placed in **NEW** plastic bags to be returned to the room.



- 2. If necessary, the Hall Director will meet with both roommates to resolve any conflicts due to the pest issues.
- 3. Follow-up inspections will be done as necessary to ensure complete eradication. Generally two follow-ups are needed.
- 4. If any new bites are found after full treatment, notify the Work Request Office immediately at 815-753-4948.



## Northern Illinois University *Environmental Health and Safety* Phone 815-753-0404, Fax 815-753-6294 Integrated Pest Management

Date:		
Caller:		
Email address		
Phone Number:		
Building:		
Room Number:		
Problem: Ants Beetles Bees/Wasps Bed Bugs Roaches Mice OtherDescribe		
Work Order Number		
Faxed: Faxed by:		



## **Insect Evaluation Questionnaire:**

1.	When did you first notice the bites (days/weeks ago?)
2.	Have you seen insects in your room?Yes/ No
3.	Are your roommates experiencing any bites?Yes/ No
4.	When did you last travel (before and/or after) noticing the bites?
5.	Have you stayed overnight during the time the bites appeared? (other rooms, friends apartments, motels, hotels, etc.)
6.	Have you had any overnight guests that have stayed in your room/apartment around the time you noticed the bug bites?
	If yes, when?
7.	Do you have problems with insect bites at home?Yes/ No
8.	Indicate specific areas where bites are located. (all over, legs, arms, back, face, etc)
9.	Have any old/new items brought into room/apartment, such as stuffed animals, TV computer, clothes, shoes, furniture, <u>any used items?</u>
10.	Have you seen spots or marks of any kind on your bed sheets?
11.	Have you sprayed any type of insecticide before or after you first noticed the bite mark/insects?
	If yes, what?
12.	When was the last time you washed your bed sheets?
13.	Have you had contact with anyone that is also experiencing bite marks?Yes/ No
14.	Have you spent any time outdoors in grassy/wooded areas that corresponds with the time frame that you first noticed the bite marks?Yes/No
	If yes, where?
15.	Do you spend significant time outside at dusk or after dark?Yes/ No
16.	Any changes in soap/detergent being used or in personal hygiene toiletries?Yes/ No
	If yes, what has changed?

## Protocol for Response to Bed Bugs



Building \_\_\_\_\_ Room \_\_\_\_\_

#### **NIU Bed Bug Treatment Instructions**

<u>YOU AND YOUR ROOMMATE</u> MUST READ AND COMPLETE THE FOLLOWING PROTOCOL IN ORDER FOR YOUR ROOM TO BE TREATED FOR PESTS. IF YOUR ROOM IS NOT PREPARED, IT WILL NOT BE TREATED. IF YOUR ROOM IS NOT PREPARED, AND IT IS NOT TREATED, ALL RESIDENTS WILL BE BILLED A \$25.00 SERVICE/TRIP CHARGE

Your room may be treated three times, usually at one week intervals.

• More treatments may be done depending on specific circumstances.

#### Your room is scheduled to be treated on \_\_\_\_\_

• You do not need to be present for the treatment. A hang-tag will be placed on your door with information on when you may return to your room after treatment, (generally 2 hours).

#### Before the First Treatment :

- All bedding MUST be placed in plastic bags. Plastic bags are available in the janitor's closet; water soluble bags can be obtained from the Hall Director on duty, or the Work Request Office, NPE room 121. All washable clothing must be placed in water soluble bags based upon laundry load sorting and size. You will use these bags to wash your clothes in. They are not harmful to clothing. These bags will be placed in the washing machine and will dissolve during the wash cycle
- 2. Remove EVERYTHING from your closets. Place in plastic bags, washable clothes place in water soluble bag.
- 3. All items from drawers and shelves must be removed and placed in water soluble (for washable items) or plastic bags.
- 4. **REMOVE ITEMS UNDER THE BED**, items placed in plastic bags.
- 5. Backpacks, duffle bags, coats and caps should also be placed in garbage bags, for placement in the dryers.
- 6. Place all bags in the middle of the room.

#### Before (or after) the First Treatment :

All clothing and bedding MUST be laundered put in the dryer for at least 30 minutes on high heat then placed in a fresh clean plastic bag. All used plastic bags must be put in the dumpster. IT IS NOT ACCEPTABLE TO PUT THESE BAGS IN THE TRASH IN THE LAUNDRY ROOM> YOU MUST TAKE THEM OUTSIDE. Shoes, dufflebags, backpacks, book bags and other items which can't be washed need to be placed in the dryer on high heat for 30 minutes.

#### First Treatment :

You will need to stay out of your room for a period of time after the first treatment. Usually two hours. (You can go in and get stuff, but the chemicals may cause mild irritation until they dry.)

#### After the First Treatment :

- 1. Place cleaned bedding on your bed, cleaned (or items that have been in the dryer) can be hung in the closet. Cleaned clothes can be put in the drawers.
- 2. Please leave the space under your bed and bottom of closets free of material if possible.



#### Before the Second and Third Treatments (one week apart) :

- 1. Bedding, including sheets must be removed from the bed, placed in a bag and left in room. (We recommend putting bedding through the dryer again, though not necessary.)
- 2. Items under the bed and on the closet floor must be removed.

#### After Second and Third Treatments :

You will need to stay out of your room for a period of time after the second/third treatments. Usually two hours. (You can go in and get stuff, but the chemicals may cause mild irritation until they dry.)

#### **BED BUG FACTS**

- About the Bug Bed bugs are parasites that preferentially feed on humans. In the past decade, bed bugs have made a comeback across the United States. Much of the comeback is due to the removal of DDT previously used by exterminators to control this pest. Such infestations usually are not a reflection of poor hygiene or bad housekeeping, although clutter will provide more places for the bugs to hide.
- Life Cycle Adults are reddish brown, flattened oval and wingless. They are visible to the naked eye, about the size of an apple seed or lentil. Adults can live up to 12 months without food (blood). The adult's lifespan may encompass 12 months. Three or more generations can occur each year.
- **Habits** Bed bugs are fast moving insects. They feed mostly at night when their host is asleep. After feeding, they then crawl away to a hiding place to digest the meal. Bed bugs hide during the day in dark, protected sites. They can hide almost anywhere in a room including bedding, carpets, wooden holes and electrical outlets. They usually congregate in groups.
- **Injury** -The bite is normally painless but may cause swelling in some people. Rows of three or more bites are characteristic signs of bed bugs. However, it is extremely difficult to determine an infestation by bites alone. *Bed bugs are not known to transmit disease.*
- **Tell-tale Signs** A bed bug infestation may be recognized by blood stains from crushed bugs or by rusty (sometimes dark) spots of excrement on sheets and mattresses, bed clothes, and walls.
- **Control Measures** All reports of potential bed bugs will be treated with respect. A licensed pest controller will work with the resident to provide the best treatment program possible in order to exterminate the pest. Several treatments may be necessary to ensure complete eradication.
- **Prevention** Bed bugs rely on people to bring them to new locations. It is important to carefully inspect clothing, luggage and furniture. Infested items should be bagged before removal to prevent shedding of the bugs and eggs while being dragged through common areas.

## Protocol for Response to Bed Bugs



Hang Tag:

Room:\_\_\_\_\_

# STOP

This room was chemically

treated for pests on:

Date:\_\_\_\_\_

Time:\_\_\_\_\_

You must wait until

(Side Two)

Your room will be treated again on:

before reentering this room. Questions? Call 815-753-0404 (see other side for instructions) Please remove bedding and items underneath the bed and the floor of the closet. Also remove items from inside bolsters. Remember food must be removed or sealed as well.