

Response to Bed Bugs: Panic vs. Reasonable Actions

Jody Green, PhD

Extension Educator, Lancaster Co.

The first thing people think about when they hear the word bed bug is “Ewww!” The truth is, bed bugs do not discriminate and can affect all individuals, families and communities regardless of cleanliness, ethnic group, race, age or socioeconomic status.

Despite the fact that bed bugs have not been shown to transmit disease to humans, these cryptic, blood-feeding insects are associated with negative social, economic, psychological and public health impacts. It is through scientific education and myth-busting that Extension hopes to reach people so they are better equipped to protect themselves and prevent bed bug infestations, rather than spread fear, create anxiety and cause reactive responses.

Do Not Panic

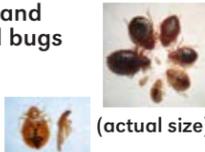
Panic is the sudden uncontrollable fear or anxiety that often leads to erratic, sometimes unreasonable behavior. Panic associated with bed bugs include throwing away all furniture, spraying general pesticides in the bedroom and/or refusing to travel to any place, by any means, at any time. Please do not panic! Panic can make the situation worse.

How Bed Bugs Spread

Panic comes from not knowing and understanding the bed bug. We must get to know the pest before we can win the battle against bed bugs. Bed bugs may get more press from plaguing large metropolitan cities and preying on unsuspecting guests staying in hotels, but the truth is, bed bugs go where we go. They cannot fly or jump, rather, they crawl and hide, sometimes onto or into our belongings. We physically and unknowingly transport



Various life stages and feeding status of bed bugs (magnified).



(actual size)

Photos by Jody Green, Nebraska Extension in Lancaster County

them from one location to another on backpacks, purses, luggage, furniture, car seats, books and even wheelchairs.

How to Identify a Bed Bug

Bed bugs are wingless, reddish-brown, oval-shaped, flattened bugs with long, segmented antennae and visible eyes. As adults, they can be approximately 1/4-inch long (often compared to the apple seed). Younger bed bugs, called nymphs, can be as small as 1/16 inch, light brown and almost transparent — revealing a dark digestive tract. After a bed bug has fed, it turns a deep, dark red and its body will look less oval and more elongated.

This variation in shape, size and color, — depending on life stage and feeding status — often leads to the misidentification of bed bugs. If you see what looks like a bed bug, try to catch it without squishing it (if you squish it, blood or

digested blood may spurt out) and have it identified. Many bugs found in the house are not bed bugs, and may be bat bugs, carpet beetles or other occasional home invaders.

Why and How Bed Bugs Bite

All bed bugs require a blood meal to survive. They locate their host by detecting exhaled carbon dioxide, usually when the host is sleeping. Bed bugs use their piercing-sucking mouthparts to pierce the skin and consume a bloodmeal, which takes 5–15 minutes.

Although bed bugs feed on the body, they do not live on the body. After feeding, the bed bug moves off the host to an undisturbed location, like the seam of a mattress or crevice of a bed frame. For the next 3–5 days, the engorged bed bug rests, digests and molts to the next stage of development, or as in the case of an adult female, lays eggs.

For some people, the bites from bed bugs result in itchy, red bumps, but for others, there is no evident reaction.

What to Look for and Where to Look

Skin reactions may prompt individuals to investigate their surroundings to search for potential biting pests. Very carefully inspect the mattress (under the bed linens), box spring, bed frame looking closely at the seams, corners, folds, cracks and crevices. Pay particular attention to any dark, fecal spotting (digested blood), shed exoskeletons and live or dead bugs.

Introduction vs. Infestation

There is a difference between an introduction and infestation. Not every location with a bed bug discovery is an infestation. An introduction occurs when a bed bug is transported and dislodged

from a place with an infestation. An infestation is when there is a population of bed bugs which are regularly feeding, developing, breeding and multiplying.

Infestations are likely to occur in places where there are regular sleeping humans, such as an apartment building, hotel, college dorm, summer camp cabin or long-term care facility. Places where introductions can occur are endless, but it is uncommon for an infestation to occur in places that do not have a consistent food source (i.e., sleeping humans). It is important to understand that bed bugs have been introduced from an infestation site, and it is the infested location that needs to be treated.

Reasonable Preventive Measures

- Communicate with others about bed bug experiences.
- Perform inspection and preventative measures when traveling (See “Bed Bugs: Souvenirs to Avoid When Traveling” online at <https://lancaster.unl.edu/pest>).
- Practice regular sanitation at home: Declutter, vacuum, wipe down surfaces and monitor for signs of infestation.
- Reduce the number of belongings brought into suspected locations.
- Inspect furniture and items (new, used and borrowed) before bringing them into the house.
- For fabrics that can be heat treated, heat in home dryer on high for 30 minutes.
- Suspected items can be bagged and kept in freezer for 4–7 days.
- Store luggage, purses, backpacks away from bedrooms.
- Install bedbug interceptors/pitfall traps around beds to monitor/prevent bed bugs from crawling from the floor to beds.

Cleaning Up After Rodents

Soni Cochran

*Extension Associate,
Lancaster Co.*

Spring is a terrific time to do some sprucing up around the home. This is also when people discover rodents have been at work nesting, chewing and leaving their droppings behind for you to find. This article focuses on how to safely clean up after rodents.

Getting Started

Use caution when cleaning up after rodents:

- Wear personal protective equipment like vinyl or latex gloves.
- Properly air out the building. The Center for Disease Control recommends opening doors and windows prior to clean-up. You need to allow at least 30 minutes for the airing-out period and during this time, leave the area. An airing-out period also applies to storage rooms, attics, sheds, barns, cabins and any other outbuildings.

Cleaning Up Dead Rodents and Nests

- Spray the nest or dead rodent until soaked with a household disinfectant solution or one part bleach to ten parts water. Other disinfectants can also be used as directed. Let the area soak thoroughly 10–15 minutes. If the rodent is in a trap, spray the trap and the rodent. Note: Some surfaces may stain or be discolored after using disinfectants or bleach.



Deer mouse

David Cappaert, Bugwood.org

- Turn a sealable plastic bag inside out. Put your gloved hand in the bag and pick up the mouse and/or nest then turn the bag right side out so the mouse and/or nest is in the bag.
- Dispose of the plastic bag with the mouse and/or nest outdoors with your household trash. You can also choose to dispose of the trap with the mouse in it this same way.

Cleaning Up Area

IMPORTANT: Do not use a broom or vacuum to clean up rodent droppings or nests. It is important droppings and dust in the surrounding area do not become airborne.

- Spray the rodent droppings and surrounding area with disinfectant until wet. Let the area soak for 10–15 minutes. Wearing gloves, use a wet towel, rag, or paper towels to wipe up the droppings.
- Clean any area which may have been contaminated by rodents using a

disinfectant or the bleach solution.

This includes countertops, cabinets, appliances and flooring. Again, use caution as disinfectants and/or bleach may discolor surfaces.

- Steam clean or shampoo upholstered furniture or carpets exposed to rodents.
- Wash bedding or clothing in hot water with laundry detergent if exposed to rodent urine or droppings.
- Insulation contaminated by rodents should be removed, placed in plastic bags and disposed of.

Cleaning Items Stored in Containers

- Move storage containers/tubs outside and place in a well-ventilated area in direct sunlight. Wipe down the outside of the container with disinfectant or bleach solution (1 part bleach, 9 parts water).
- Remove items from storage container/tub after disinfecting the outside of the container. Once the items are removed the inside of the container can be disinfected.
- Clothing, bedding, stuffed toys: Launder in hot water and detergent. Dry on high heat or hang in sun to dry.
- Books, paper, non-washable items: Leave outdoors in direct sunlight for several hours. You can also leave in a rodent-free area for one week before wiping down with cloth moistened with disinfectant.
- Plastic, glass and metal items can be sprayed with disinfectant and wiped down with rags or paper towels before washing. Rags and paper towels should

About Hantaviruses

Deer mice and white-footed mice are known hosts for hantaviruses. Both of these mouse species are found in our area. We can be exposed to hantaviruses in a host rodent's droppings and urine. Once a rodent excretes droppings or urine into the environment, the virus remains infectious for 2–3 days. The sun's ultraviolet rays inactivate hantaviruses.

then be discarded in the trash.

- Cardboard boxes contaminated by rodents should be discarded in the trash.

Following Cleanup

Wash your hands thoroughly.

If you feel ill or develop a fever after five days of handling rodents, nests and/or their droppings, seek medical attention. Inform medical personnel of your activities.

Controlling a Rodent Problem

If you are dealing with a rodent problem, it is important to take steps to trap and prevent rodents from entering your home or building. Snap traps or spring mouse traps are effective and inexpensive tools to use. For information on how to set traps, read Nebraska Extension's NebGuide Controlling House Mice (G1105), available at the Extension office and online at <http://lancaster.unl.edu/pest>.

Source: Centers for Disease Control