

UNIVERSITY STUDENT HEALTH SERVICES • Fact Sheet

BEDBUGS**WHAT ARE BEDBUGS?**

Bedbugs are wingless insects that prefer to feed on humans at night, leaving bites that typically result in red itchy bumps. Their number has increased dramatically since 2000 due to frequent foreign travel and the prohibition of DDT and similar pesticides in 1972. While bedbugs engage in the exchange of blood, there is no evidence that they transmit any diseases.

WHERE ARE BEDBUGS FOUND?

Bedbugs are found around the world, mostly in subtropical and tropical areas. Because they are nocturnal feeders, bedbugs most commonly infest areas where people sleep. They tend to be more common in college residences, apartment buildings, hotels, and shelters.

❖ Hiding Places:

- During the day, bedbugs hide in cracks and crevices, where the females lay their eggs.
- Common hiding places include mattress seams, box springs, bedframes, window/door frames, furniture drawers, curtain folds, cushion seams, clothes on the floor, cracks in the floor, under peeling paint, and behind electrical outlet covers and picture frames.

❖ Night-Time Feeds:

- Bedbugs are most active at night, when they come out to feed on resting humans. They are attracted by our bodies' warmth and the carbon dioxide that we exhale.
- Bedbugs tend to bite exposed areas of skin, such as the face, neck, hands, and arms.
- The bites are painless because a numbing substance is injected into the skin.
- Bedbugs usually take about 5-10 minutes to finish a blood meal.

WHAT DO BEDBUGS LOOK LIKE?

Bedbugs typically have flat, oval, red-brown bodies, about the size of a dog tick or apple seed (up to 1/4 inch long).

- They may range in color from a light tan to a dark brown to a burnt orange. They become off-white after molting.
- Their flat shape helps them hide in crevices.
- After feeding, their bodies elongate and swell, turning dark red in color.
- Eggs are white and 1/32 inch long; they take 4-10 days to hatch.



Photo courtesy of Orkin Co.

HOW DID I GET BEDBUGS?

Bedbugs are not typically spread by person to person contact.

- Bedbugs are known as “nature’s hitchhikers” because they are usually transported via personal items, such as clothing, backpacks, bedding, suitcases, boxes, and furniture.
- They can spread quickly to other locations (such as your parent’s house, your friend’s apartment, or your significant other’s room) by hitching a ride on your backpack or clothing -- or on the belongings of roommates and friends.
- Bedbugs cannot fly or jump.

WHAT ARE THE SYMPTOMS?

Classic bedbug bites appear as small red bumps (2-5mm) often with a tiny central scab.

- Bites are often found in a line or cluster.
- Itching is common and can be severe.



Photo courtesy of UpToDate.

However, reactions to bedbug bites can vary:

- Bites may look like hives, depending on the degree of reaction to the insect's saliva.
- Some individuals develop a more severe skin reaction that leads to pus-filled blisters.
- Some people only develop flat darkened spots or have no skin reaction at all.
- Sometimes, there can be a delayed skin reaction for up to 10 days after the bite, making it harder to pinpoint when and where the exposure occurred.



Bedbug bites.

WHEN SHOULD BEDBUGS BE SUSPECTED?

Bedbugs should be suspected in people with recurrent, itchy, red bumps or hives that last several days. However, it is often difficult to tell bedbug bites apart from other bug bites, such as mosquitoes and fleas. Clues that suggest the presence of bedbugs include:

- Finding new bites when awakening in the morning, especially if they form a line (but not all bites in a row are from bedbugs).
- Potential exposure to bedbugs (such as recent travel, living in a building with a known bedbug infestation, etc).
- Household members with similar symptoms.

WHAT ARE THE SIGNS OF A BEDBUG INFESTATION?

The only way to definitively identify an infestation is to find live bedbugs. However, this can be difficult since bedbugs are small and tend to hide during the day.

A pest control service is the preferred method for detecting bedbugs. Visual inspection of hiding places and bedbug traps may be used.



Bedbugs like to hide in mattress seams, bedframe crevices, backpack seams, etc.

Other signs of infestation may include:

- Small bloodstains on mattresses and sheets.
- Bedbug excrement (usually rust-colored) in bedding, the cracks of walls, furniture, and wallpaper.
- Pale yellow exoskeletons left behind from molting.
- A sweet musty odor from the bedbugs' oil secretions (if the infestation is severe).



Bedbug excrement.

Photos courtesy of Orkin Co.

HOW ARE BEDBUG BITES TREATED?

In most cases, no specific treatment is needed. Bites typically resolve in one week. If bites become secondarily infected (such as from scratching), they may take several weeks to resolve.

❖ Symptom Relief:

Treatment is aimed at controlling itching and discomfort. Common options include:

- Over-the-counter anti-itch lotions and creams. Products containing pramoxine can soothe itching. Examples include Sarna, Aveeno Anti-Itch, and Neutrogena Skin Aid.
- Antihistamine medications. These over-the-counter oral agents are also used for itching.
 - Claritin (loratadine), Zyrtec (cetirizine), and Allegra (fexofenadine) are non-sedating options that last 24 hours.
 - Benadryl (diphenhydramine) is effective but needs dosing every 4-6 hours. Benadryl also causes drowsiness, which is useful for nighttime symptoms.
- Corticosteroid creams. A thin layer is typically applied twice daily as needed for itching. Hydrocortisone 1% is a low-dose cream available over-the-counter. Stronger options are available by prescription. Avoid excessive or long-term use due to the risk of skin thinning, which can lead to discoloration and stretch marks.

❖ **Secondary Infections:**

- To prevent bites from getting infected, keep your skin clean and avoid scratching.
- Consult your healthcare provider if signs of bacterial infection develop (such as redness, pain, swelling, pus, and fever).

HOW DO I GET RID OF BEDBUGS?

❖ **If you live in VCU Residence Halls:**

- Do not try to eliminate bedbugs yourself!
- **If you think you have a bedbug problem, notify VCU immediately. Contact Residential Life and Housing (804-828-7666), your Housing Manager, or go to housing.vcu.edu to submit a maintenance request.**
 - VCU has contracted with an extermination company to professionally treat residence hall rooms and apartments. They will work with students to diagnose a bedbug infestation, schedule the extermination visit, and prepare for the day of extermination.
 - Because bedbug infestations can spread rapidly from room to room, VCU Residential Life and Housing maintains an aggressive eradication campaign to quickly respond to concerns and treat living spaces where a bedbug infestation is confirmed.

❖ **If you live in off-campus housing:**

- **Promptly contact your landlord to confirm and treat a bedbug infestation.** The US Department of Housing and Urban Development has concluded that it is virtually impossible to prove fault with regard to who may have created a bedbug infestation within a rental property. Under Virginia law, the landlord is responsible for correcting the situation and covering the costs.
- **If your off-campus landlord refuses to accept responsibility for bedbug extermination or its costs, contact the Off Campus Student Services Office for further assistance.** Call 804-828-4514, email offcampus@vcu.edu, or visit vcu.campusgroups.com/ocss/home to schedule an appointment.

❖ **Additional Treatment Considerations:**

Some of these measures may not be necessary if professional exterminators are treating the infestation.

- Scrub your mattress and upholstered furniture with a stiff brush to remove bugs and eggs from crevices.
- Thoroughly vacuum your entire living area. Remove the vacuum bag, seal it in a plastic bag, and dispose of it immediately.
- After scrubbing and vacuuming your mattress, put it in a plastic cover that zips. Do not remove the cover for 12 months as bedbugs can live for up to a year between feedings!
- Wash clothes and linens in hot water, and dry them on the highest setting.
- Wrap and seal items like suitcases in large trash bags and leave them in the sun for 2-3 days; the heat will kill the bedbugs and their eggs.
- You may also choose to freeze bedding and other infested fabrics. For home freezers (target temperature of 0°F or -18°C), freeze items for at least 3-4 days. Warmer temperatures will require longer freeze times.
- Repeat a thorough cleaning 1-2 weeks after an infestation to remove any bedbugs that may have hatched later.

HOW CAN I PREVENT BEDBUG INFESTATIONS?

❖ **Home Environment**

- Wash bed linens in hot water once a week.
- Vacuum around the home at least once a week.
- Reduce clutter to limit hiding places for bedbugs.
- Caulk holes in floors and walls. Remove peeling wallpaper.

- Inspect your bed periodically for bedbugs. Check in seams, behind the headboard, and between bedposts and slats.
- Inspect your book bag periodically. Check seams and pouches. Avoid placing your book bag on or under your bed.
- Inspect secondhand furniture and items prior to bringing them into your home.

❖ **Pets**

- Check household dogs and cats for bedbugs. Bedbugs will feed on any mammal.

❖ **Travel**

- Thoroughly inspect any room in which you are staying, including mattress seams, crevices in box springs, and the space behind wall hangings.
- Avoiding placing luggage on or under the bed; use a luggage rack away from the bed when possible.
- After returning from travel, wash all clothing in hot water and inspect your luggage for signs of bedbugs. Scrub and vacuum suitcases.
 - Another option is to seal suitcases in a plastic bag, and leave them in the sun for 2-3 days to kill bugs and eggs.
 - An alternative to this method is to simply leave your luggage in the trunk of the car “to bake” in the heat for 2-3 days.

RECOMMENDED WEBSITES:

- www.mayoclinic.org
- www.cdc.gov/parasites/bedbugs
- identify.us.com