

AHCA/NCAL Infection Preventionist Hot Topic Brief and Tip Sheet

Managing Bed Bugs and Head Lice in Healthcare Settings

Although neither bed bugs nor head lice are known to cause any infectious illnesses, nobody likes it when they are found on them or in their environment. These pests can cause a lot of confusion and concern among staff unless clear policies and procedures are in place for use when bed bugs or lice are found on a resident or in the facility. This tip sheet was developed to provide the infection preventionist with an easy reference to basic information and provide some helpful tips for consideration.

Background and Scope: Bed Bugs

Bed bugs are small, reddish-brown, oval-shaped bugs about the size and shape of an apple seed. They are fast crawling nocturnal blood-feeders who leave their hiding places at night when their host is asleep. They do not fly or hop. Bed bugs use their sharp beak to pierce the skin of a host which includes humans, and other mammals. Bites look like mosquito or flea bites—a slightly swollen and red area that may itch and be irritating. The bite marks may be random or appear in a straight line. After feeding, they crawl away to a hiding place to digest the meal. They can survive weeks between meals. They hide during the day in dark, protected sites such as fabric, wood, or paper surfaces. They do not stay on their host, nor do they lay eggs on their host.

Healthcare settings should have a plan of action for infestations. Management of bed bug infestations should include consulting with a licensed pest management company that utilizes integrated pest management (IPM) techniques. IPM programs use information about the life cycles of pests to manage them with the least amount of risk to people, property, and the environment.



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Suggestions for Practice for Managing Bed Bugs in Healthcare Settings

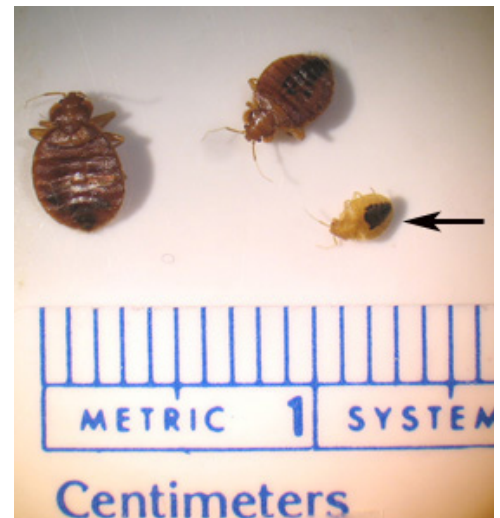
*Some may be performed by licensed pest management company.

- **Inspect and treat*:** Have a professional inspect and treat any areas where bed bugs are suspected, as well as adjacent rooms and on floors above and below the infested room.
- **Move residents:** If bed bugs are found in a resident room, move the resident to another room after bathing or showering and changing clothes.
- **Treat belongings:** Remove and seal resident belongings in bags, wash and dry clothing on high heat for at least 20 minutes.
- **Seal access points*:** Seal any gaps around electrical, cable, and phone outlets, and where plumbing goes through common walls.
- **Inspect regularly:** Regularly inspect common areas, waiting rooms, visitor lounges, laundry rooms, and equipment like wheelchairs, med carts, and food carts.
- **Vacuum:** Vacuum bed bug-prone areas daily and immediately seal and dispose of the vacuum bag.
- **Install encasements:** Install encasements on mattresses and box springs.

Follow your facility policy for the use of PPE during cleaning rooms when bed bug infestation occurs.

Example of a Procedure for Responding to a Bed Bug Incident in a Healthcare Setting

1. Confirm the bed bug infestation.
 - a. Resident care staff, EVS and laundry staff should be trained in recognizing and reporting bed bugs or signs of bed bug activity, like rust-colored stains on sheets. If they suspect bed bugs, they should report it to their supervisor immediately.
 - b. When possible, one of the bed bugs should be captured and secured in a specimen container and submitted to the pest management professionals for identification.
2. When bed bugs are discovered in a resident room, nursing staff should assist the resident with bathing or showering and changing into fresh clothing then transfer them to another room. Medical equipment (wheelchairs, IV stands, etc.) should be cleaned, disinfected, inspected and verified free from bed bug infestation.



Bed bugs — Two adult and one nymph [Contributed by the CDC \(Center for Disease Control and Prevention\)](#)

3. Resident belongings such as clothing, backpacks, purses and luggage should be sealed in a clear plastic bag and the licensed pest management company that utilizes integrated pest management (IPM) techniques should be consulted for recommended way to kill any bed bugs that may be present.
4. Follow standard precautions for laundry and bed linen. Transport laundry in a sealed bag and place it directly into the washing machine. Dry on high heat for at least 30 minutes. Discard plastic bags used for transport directly into the trash. Make sure the hampers are disinfected after each use. The facility policies and procedures should be followed in the laundry area to avoid cross contamination.
5. Environmental service (EVS) staff should follow the facility policy for the use of PPE during the room cleaning process when bed bug infestations occur. Note: Bed bugs are not spread by person-to-person contact.
6. Equipment and furnishings should be cleaned and disinfected per routine facility specific processes.
7. Equipment and furnishings, including beds, should not leave the room until the pest control manager has thoroughly inspected them and finds them bed bug free. Discarding mattresses is not likely to keep



Bed Bug Eggs Mattress Corner by Thos Ballantyne. Creative Commons License

bed bugs from spreading, and new mattresses can be infested if bed bugs are in the room. Instead, it's much more effective to have a professional treat your mattress with treatments like steam cleaning, heat treatments, vacuuming, and bed bug covers. The professional pest control consultant should verify that furnishings and rooms involved are bed bug free.

8. Due to the potential health impacts of insecticide sprays on residents who are ill, only facility approved control measures should be used by the pest control professionals and only in unoccupied rooms. Often methods such as steam, heat, aggressive cleaning, laundering and targeted vacuuming are used when practical in place of chemicals in healthcare settings. If pesticides are proposed, the IP may confirm they are approved for indoor use and determine if actions should be taken by residents and staff during and after their use.
9. Upon completion of treatment of the resident room by the pest control professional, the room should be terminally cleaned by the EVS staff per policy and textiles such as cubicle curtains replaced. Upholstered furniture should be thoroughly vacuumed, or steam cleaned. Dispose of all vacuumed refuse from an infested room in a plastic bag (including the vacuum cleaner bag) and ensure that the plastic bag has been sealed tightly.

10. Rooms that have been serviced for bed bugs should be rescheduled for follow-up inspection, re-serviced as needed and kept off-line until the bed bugs have been successfully controlled.
11. Complete the room with a final inspection. If any bugs are found alive, then repeat the process of treatment and cleaning. If there are no signs of bed bugs, then open the room for the residents.
12. Affected rooms and adjacent rooms (i.e. next door, the floor above and below) should be inspected for 2–3 months to ensure that no isolated pockets of bed bugs remain. This should include waiting rooms, visitor lounges, and common areas.

Background and Scope: Head Lice

Now that we have reviewed tips for managing bed bug infestations, let's look at the most common type of louse that you may see in your healthcare setting, the head louse. Head lice (pediculosis) are parasites that infest the head and neck and attach their eggs to the base of the hair shaft. These tiny insects (about 1/8" long) make their home in human hair and feed on blood. Head lice multiply rapidly, laying small greyish-colored, oval-shaped eggs (called nits) which they glue to the base of the hair, close to the scalp. Look closely for nits along the hairline at the back of the head and neck and behind the ears. Nits should not be confused with an accumulation of hair spray, hair gels, or dandruff, which can be easily flicked off the hair; nits cannot because they are firmly attached to individual hairs.

Head lice are spread by direct head-to-head contact with a person who is experiencing an infestation. This could be from contact with family members, visitors, staff or other residents. Head lice can also be spread by sharing personal items such as combs, brushes, other hair-care items, towels, pillows, hats, and other head coverings. Dogs, cats, and other pets do not spread head lice.

Lice move by crawling; they cannot hop or fly. Head lice are not known to spread disease. Anyone can get head lice. They are not a sign of being dirty. Most people don't know they are infested until they see the nits or lice. People with head lice may not have symptoms, particularly with a first infestation or when an infestation is light. Itching (pruritus) is the most common symptom of head lice infestation. It is caused by an allergic reaction to louse bites. It may take four to six weeks for itching to appear the first time a person has head lice. Head lice infestations are found throughout the world, most commonly on children.



Image from [CDC Public Health Image Library](#)

TIP: Use Contact Precautions to prevent transmission to others.

The resident diagnosed with head lice is usually moved to a private room and placed on Contact Precautions until 24 hours have passed after effective treatment is completed. This means that staff and visitors must wear a gown and gloves and wash their hands with soap and water or an alcohol-based hand sanitizer before entering and leaving the patient's room. If there is the possibility that they will have head-to-head contact such as when doing transfers on dependent residents, then disposable head covering can also be worn.

Suggestions for Practice for Managing Lice in Healthcare Settings

- **Treatment should follow product instructions to be successful.** One telltale sign of headlice is a persistent itching of the scalp, which is sometimes accompanied by infected scratch marks or what appears to be a rash. Upon exam there will be visualization of the lice as well as the nits that are close to the scalp. The resident should be treated for the lice as soon as possible once diagnosed. This usually involves applying a pediculicide to the hair, as directed by a physician. A second treatment is often needed 9–10 days after the first to kill any newly hatched lice.
- **Removing the nits by proper nit combing is important in achieving successful treatment results.** If nits are not treated or properly removed from the hair, new lice can hatch, lay more eggs, and the problem will continue. Proper nit combing takes time, but it is necessary to treat and stop a head lice infestation. [CDCH: A How-To Guide for Nit Combing](#)
- **Follow Standard Precautions with laundry.** Machine wash and dry clothing, towels, bed linens, and other items that a person infested with lice wore or used during the two days before treatment. Dry them on high heat. If you can't wash or dry clean items, seal them in a plastic bag and store them for two weeks. In instances where families do their residents' laundry, the staff should provide specific instructions for effective head lice laundering to them.
- **The resident's room is cleaned after treatment.** Focus on washing all items that touched the person's head in hot water, including clothes, bedding, towels, and hats, and thoroughly vacuum carpets, furniture, and mattresses. Lice live about two days after they fall off the host and the primary concern is removing any lingering nits or eggs; avoid using unnecessary insecticides as they are not typically needed and can be harmful.
- **View a short video of a live louse.** [Lice Clinics of America: What Do Lice Look Like?](#)



References

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