

INTEGRATED CARE MANUAL

Subject: CARE OF THE PATIENT WITH BED BUGS

Section: Infection Control - General

Developed by: Infection Prevention,
Environmental Services, Linen Services

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Review Date:

Next Review Date: 10/13

Purpose: To describe processes and procedures to manage patients admitted with bed bug infestation.

Background:

Mode of Transmission: Direct contact with an infested person and their living space.

Period of Communicability: As long as bed bug remains alive on the infested person, clothing or personal items.

Prophylaxis for Susceptible Exposed Persons: None

Spread of Disease: Although bed bugs can harbor pathogens in their bodies, transmission to humans is highly unlikely. For this reason, they are not considered a serious disease threat. Their medical significance is mainly limited to the itching and inflammation from their bites.

Treatment: Antihistamines and corticosteroids may be prescribed to reduce allergic reactions, and antiseptic or antibiotic ointments to prevent infection. Infestations also may cause anxiety, embarrassment, and loss of sleep.

Preventing & Treating Infestation

At the time of detection– If the patient has a history of infestation or if bed bugs are detected, the following should occur unless medically contraindicated:

1. Confirmation of the presence of bed bugs. Confirmation requires finding and identifying the bugs themselves.
2. Implement Contact Precautions
3. Remove the patient clothing immediately and double bag. Send home with family or friends and instruct to home launder with hot water and detergent and heat dry. Items should be kept in a sealed plastic bag until it's clear there are no more bed bugs.
4. Provide a shower prior to inpatient admission. This allows for inspection of the body for additional identification of additional bugs as well as inspection of the skin integrity due to bites.
5. Notify Environmental Services (8737) and/or Infection Prevention (44-651)

Ongoing:

1. Maintain Contact Precautions.
2. Linen is double bagged, tied with a single knot, and laundered using the normal process (includes hot water (at least 160°F) with detergent and dried with heat for at least 20 minutes.
3. Carpets, floors & bed frames are vacuumed daily, using the brush and crevice tool, including moving and scraping the end of the suction wand along infested areas such as seams, tufts and edges of bedding, and the perimeter edge of flooring.
 - When finished dispose of the vacuum contents in a sealed trash bag.

4. During prolonged stays, Environmental Services may coordinate a cleaning by the servicing pest control company, provided the patient is NOT in the room at the time.

At the time of discharge:

5. Environmental Services will notify the servicing pest control company who will thoroughly inspect cracks and crevices of bed frames and mattress edges and tags on all sides, looking for bugs, and the light-brown, molted skins of the nymphs.
 - Infested mattresses & box springs which cannot be adequately treated will be discarded. (Successful treatment of mattresses and box springs is difficult. Bed bugs have an affinity for wood and fabric more so than metal or plastic).
6. After the assessment, the Exterminator service is to treat the room using the approach indicated by the inspection. The room is held for at least 24 hours. The Pest Control company will return to re-inspect and retreat if necessary. If indicated, adjoining rooms may be treated as well.
 - Carpets, floors & bed frames are vacuumed, using the brush and crevice tool, including moving and scraping the end of the suction wand along infested areas such as seams, tufts and edges of bedding, and the perimeter edge of flooring.
 - When finished the vacuum contents are disposed of in a sealed trash bag.

Training

Environmental Services staff are trained on bed bug surveillance, control, and prevention at the time of employment and annually thereafter. Elements of a training curriculum should include

Ongoing inspection procedures of patient rooms including inspection of

- seams, joints, and cracks on mattresses, bed frames, baseboards, upholstered furniture, and window sills;
- cracks and crevices in the room, including the floors; and walls behind picture frames.

Housekeeping and maintenance procedures including vacuuming and appropriate disposal of refuse.

- Review of reporting and referral procedures subsequent to detection of bed bugs or evidence of an infestation.
- Review of prevention and control measures aimed to reduce bed bug populations and limiting their spread within the facility.



Description of bugs:

- Bed bugs are small, brownish, flattened insects that feed solely on the blood of host.
 - Another likely sign of bed bugs is rusty or reddish spots of blood on bed sheets, mattresses, or walls. Heavy infestations may have a musty or "buggy" smell, but the odor is seldom apparent and should not be relied upon for detection.
 - Adult bed bugs are about 1/4 inch long and reddish brown, with oval, flattened bodies. They are sometimes mistaken for ticks or cockroaches.
- Nymphs resemble the adults, but are smaller and somewhat lighter in color.
- The eggs are tiny, whitish, and hard to see without magnification (individual eggs are about the size of a dust spec). When first laid, the eggs are sticky, causing them to adhere to

substrates. Newly hatched nymphs are no bigger than a pinhead

- Bed bugs do not fly, but can move quickly over floors, walls, ceilings and other surfaces.
- Female bed bugs lay their eggs in secluded areas, depositing up to five a day and 500 during a lifetime.
- Bed bugs are very resilient. Nymphs can survive months without feeding and the adults for more than a year.
- Bed bugs are active mainly at night. During the daytime, they prefer to hide close to where people sleep.
 - Bed bug bites occur on any bare skin exposed while sleeping (face, neck, shoulders, arms, hands, etc.).
 - Engorgement takes about three to 10 minutes, yet the person seldom knows they are being bitten. Symptoms vary with the individual. Some develop an itchy red welt or localized swelling, which sometimes appears a day or so after the bite. Others have little or no reaction. The welts and itching may look like mosquito bites.
 - Bed bugs also are suspect if the patient wakes up with itchy bites that they did not have when they went to sleep.
- Their flattened bodies enable them to fit into tiny crevices - especially those associated with mattresses, box springs, bed frames, and headboards.
- Initial infestations tend to be around beds, but the bugs eventually may become scattered throughout a room, occupying any crevice or protected location. They also can spread to adjacent rooms.

Resources:

University of Kentucky Entomology Entomology and Nematology Department, Florida Cooperative Extension Service, Institute of Food and Agricultural Sciences, University of Florida. Cimex lectularius Arthur C. Huntley M.D. Dermatology Online Journal 5(1):6

“Preventing and Getting Rid of Bed Bugs Safely”, New York City Public Health Department, obtained from internet on 9/20/2010.

“Pulling Back the Sheets on the Bed Bug Controversy: Research, Prevention & Management in Hospitals & Long-Term Care Facilities”, American Society for Healthcare Environmental Services, obtained from internet on 9/20/2010.

Delaunay P, Blanc V, Dandine M, Del Giudice P, Franc M, Pomares-Estran C, et al. Bedbugs and healthcare-associated dermatitis, France [letter]. Emerg Infect Dis. Obtained from the internet site <http://www.cdc.gov/EID/content/15/6/989.htm>, on 9/20/2010.