

GUIDANCE FOR PROPERTY OWNERS AND TENANTS ON THE CONTROL AND PREVENTION OF BED BUG INFESTATIONS IN CALIFORNIA

There has been a resurgence of bed bug infestations throughout the United States. In response to this re-emerging public health issue, the California Department of Public Health (CDPH) is providing guidance to assist affected entities on the prevention, surveillance, and control of bed bug infestations. Based on reports from local health departments and pest control operators (PCOs), bed bug infestations have been found in hotels, nursing homes, public housing, apartment complexes, shelters, moving vans, jails, furniture rental stores, dormitories and other multi-unit dwellings. In addition, information is often sought by private home owners experiencing bed bug infestations. This guidance document is intended to provide recommendations to California stakeholders on procedures to control active bed bug infestations, minimize the spread of infestations, and prevent future infestations.

Bed bugs are small wingless insects, about 1/4 of an inch or smaller, ranging in color from yellowish-white to reddish-brown. Bed bugs feed on blood, normally during the night. Most, but not all, of a bed bug population will congregate in cracks and crevices near where humans and pets sleep or rest. Bed bugs live in furniture such as mattresses, box springs, couches, easy chairs, dressers, and night tables, as well as electronic devices such as alarm clocks and radios. Infestations of bed bugs are not limited to homes and hotels; they can be found in public transportation, hospitals, and long-term care facilities. Evidence of a bed bug infestation may include: presence of the bed bugs, their cast exoskeletons, or rust-colored spots/stains on bedding, walls, or furniture. Bed bugs can live many months (adults generally live up to one year) without a blood meal while hiding in cracks and crevices.

Bed bugs, while a significant social problem, do not transmit disease to humans. However, bed bug bites can cause red, raised, itchy lesions on the skin that may take up to 14 days to develop and allergic reactions to the bites have been reported. Scratching bug bites can also lead to secondary skin infections. Some individuals report significant psychological distress, disruption of sleep, nervousness, and agitation when dealing with a bed bug infestation.

The essential components of bed bug control and prevention are:

- identification of bed bug infestations;
- utilization of best available bed bug treatment strategies and prevention measures; and
- cooperation between all stakeholders affected by a bed bug infestation.

A. Bed bug prevention and control recommendations for owners and operators of hotels and other multi-unit dwellings

When confronted with a bed bug infestation, owners and operators of hotels and other multi-unit dwellings should not attempt to control the infestation prior to an assessment from a licensed PCO. Licensed pest control operators and/or companies should always provide proof of their licensure upon request (visit the [California Department of Consumers Affairs, Structural Pest Control Board license webpage](#) or call (916) 561-8704 to confirm that the company is certified); hired PCOs should follow the [National Pest Management Association \(NPMA\) guidelines](#) when conducting bed bug inspections and treatments

(http://npmapestworld.org/default/assets/File/techresources/NPMA%20Bed%20Bug%20BMPs%20approved%202016_07_28.pdf?_ga=1.140190067.1987025891.1470938868).

Cooperation between the PCO, owners and operators, and tenants is essential to successfully eradicate an infestation. Due to the elusive nature of bed bugs, control can be expensive and time consuming. Educating staff to identify bed bug infestations will prompt more rapid treatment by PCOs and, thereby, prevent bed bug populations from spreading throughout the facility. A prompt response to the problem will reduce the financial burden of bed bug control to facility owners and operators.

Training recommendations for staff of hotels, guest houses, and other multi-unit dwellings

Owners and operators should provide training to all staff members on bed bug surveillance, control, and prevention. Training should be provided at the commencement of employment and annually thereafter. Elements of a training curriculum should include:

1. Identification of bed bugs and explanation of their life cycle.
2. Review of ongoing inspection procedures for rooms including inspection of
 - a. seams, joints and cracks on mattresses, bed frames, baseboards, other furniture, and window sills,
 - b. cracks and crevices in the room, including the floors, and,
 - c. walls behind picture frames and other potential harborage.
3. Review of housekeeping and maintenance procedures, including vacuuming and appropriate disposal of refuse.
4. Review of reporting and referral procedures subsequent to detection of bed bugs or evidence of an infestation and instruction on communication with tenants.
5. Review of prevention and control measures aimed to reduce bed bug populations and limiting their spread within the facility.

Recordkeeping by owners and operators of hotels, guest houses, and other multi-unit dwellings

Owners and operators should keep written records of:

1. Identified instances of bed bug infestations either via staff referral, tenant or guest complaint, PCO inspection, or observation by health inspector.
2. Responses to tenant complaints.
3. Treatments and recommendations made by PCOs. Inspection findings must be provided to tenants living in multi-unit dwellings within 2 business days of receipt of PCO findings.¹
4. Cooperation among staff and tenants regarding recommendations made by PCO, owners and operators, or health inspector to abate the bed bug infestation.

Suggested procedures for owners and operators reporting and responding to bed bug complaints in multi-unit dwellings, hotels, and guest houses

Building owners and operators should:

1. Develop a written referral procedure for both tenants and staff reporting pest complaints to management. This includes recording location of the infestation, responding to bed bug complaints, and contacting a licensed PCO.
2. Assist tenants and/or guests in seeking medical assistance when necessary.
3. Respond to staff or tenant complaints of bed bugs within 48 hours and contact a registered PCO to inspect the dwelling. Tenants must be notified of inspection findings, in writing, within 2 business days of receipt of the PCO findings.¹ The plan of action should be executed within 24 hours after the written notice is provided to the tenant. If bed bugs are found in common areas, all tenants must be notified of the PCO findings.¹
4. Relocate tenants while the infested room is being serviced by a PCO, when necessary. If a tenant is relocated, the room they are relocated to should be inspected by a PCO once the tenant has vacated to ensure bed bugs were not transferred to the room.
5. Instruct the tenant to launder their clothing and linens, placing clothing and linens in plastic bags during room relocation so infested items do not spread bed bugs during transport to the laundry or new room. Tenants should bring a minimal amount of clothing and personal items with them into the relocated room.
6. Notify tenants adjacent (next door, across the hall, above, and below the infestation) to bed bug infested properties. Such notification should specify the presence of bed bugs in adjacent properties, and the need to prepare their properties for inspection and treatment, if necessary, for bed bugs.
7. Instruct the PCO to inspect all rooms and properties above, below, and adjacent to bed bug infested rooms and properties, including rooms and properties where tenants were relocated.

Landlords (individuals or companies that rent or lease out multi-unit dwellings) cannot evict, harass, increase the rent, or deny services to a tenant if the tenant requests the landlord treat for bed bugs or reports to a governmental agency or to other tenants the possible infestation of the dwelling.² Additionally, a landlord cannot show, rent, or lease a vacant dwelling if the dwelling is known to be infested with bed bugs. The landlord, however, is not responsible for the inspection of a dwelling if no previous reports were provided of a suspected bed bug infestation and if the infestation is not apparent on visual inspection.¹

Treatment and control of bed bug in hotel rooms and guest houses

Owners and operators of hotels and guest houses should:

1. Contact a licensed PCO to perform the bed bug treatment.
2. Comply with the PCO's instructions on how to prepare the room for bed bug eradication, or ensure that the tenants prepare their rooms for bed bug treatment. In some instances, owners and operators may need to provide staff to assist with moving beds and other heavy furnishings.
3. Never remove any items from bed bug infested rooms before inspection and treatment by a PCO. This will help to prevent relocating bed bugs to other areas within the premises.

4. Ensure that the PCO inspects and/or treats all crevices, baseboards, wall voids, window sills, bed frames, mattresses, box springs, furniture and closets in infested rooms and rooms adjacent to infested rooms.
5. Make available to PCOs all rooms adjacent to the infested room as well as storage rooms, vacuum cleaners, service carts, hallways, and laundry rooms for bed bug inspection and treatment where necessary.
6. Seal all cracks and crevices in infested rooms, per PCO instructions.

Management of furnishings and materials infested with bed bugs

1. Do not remove infested materials designated for disposal until after the room is inspected and/or treated by the PCO.
2. Remove clothing, linens, and materials designated for disposal from an infested room in sealed plastic bags. This will help to prevent relocating bed bugs to other areas within the premises.
3. Wash infested linens in hot water and dry using the hottest setting of the dryer for at least 30 minutes; this will kill bed bugs and bed bug eggs. If items cannot be washed, drying them on the hottest setting for at least 30 minutes should kill bed bugs and their eggs.
4. Items to be dry cleaned should be placed in sealable plastic bags and the dry cleaning company informed of the potential infestation with bed bugs.
5. Dispose of all vacuumed refuse from an infested room in a sealable plastic bag (including the vacuum cleaner bag). All other vacuum components should be washed with hot water and detergent.
6. Have a PCO service all furniture and mattresses prior to disposal. After treatment, the items marked for disposal should be wrapped in plastic before removal from the infested room to the disposal site. This will prevent bed bugs and eggs from falling off while the items are moved.
7. Clearly label infested items as "BED BUG INFESTED" prior to disposal or placing infested items curbside.

Management of rooms or situations with tenants unable to take care of themselves, or tenants who are unable to prepare a room for treatment

Owners and operators of hotels, guest houses, and other multi-unit dwellings should contact a social worker, case worker, or local county health department for assistance with tenants or guests who are unable to prepare bed bug infested rooms for inspection and treatment by a PCO.

Other recommended actions to prevent and control bed bug infestations

1. Avoid purchasing used furniture or mattresses, if possible. If used furniture or mattresses are purchased, inspect and/or treat for bed bugs before accepting delivery.
2. Use metal bed frames instead of wooden bed frames whenever possible.
3. Remove bed bug infested mattresses, box springs, and bed frames from the infested property after treatment by a PCO. If this is not possible, the mattresses and box

springs should be encased in a plastic, commercially available mattress cover at least 0.8 mm thick with a zipper after treatment to prevent bed bugs from reinfesting the mattress and box springs. Eggs remaining on the mattress and box spring after PCO treatment will hatch, but the bed bugs will not be able to bite through the plastic covering.

B. Responsibilities of tenants for the prevention, surveillance and control of bed bugs

Tenants should cooperate fully with the recommendations provided by the PCO to prepare rooms for bed bug inspection and treatment. Laundering of linens and clothing should be completed the same day the PCO services the infested rooms. Failure to cooperate may result in a citation from the local health department.

Responsibilities of tenants in bed bug infested dwellings

Tenants should:

1. Ensure that all furniture and other items brought into the property are free of bed bugs by thoroughly inspecting each item for the presence of bed bugs, their cast exoskeletons, and/or rust-colored spots/stains. Tenants should not knowingly bring bed bug infested items into the property.
2. Report a bed bug, or other pest infestation, to the owner or operator within 24 hours of the pest sighting.
3. Cooperate with recommendations of the owners or operator and PCO to prepare rooms for bed bug treatment, inspection, and any necessary follow-up treatments until bed bugs have been eliminated. Do not attempt to treat the infestation.
4. Do not remove anything from an infested room until after the room is treated by a PCO. (One exception is the laundering of linens and clothing. The day of the pesticide treatment all bedding and clothing should be bagged in plastic prior to removal from the infested room; launder using hot water, and dry using the hottest setting on the dryer for at least 30 minutes.)
5. Prior to treatment by a PCO, all clutter, debris, and garbage in the infested room should be placed in plastic bags and sealed. The bagged items should remain in the infested room for treatment by a PCO prior to disposal. Additionally, items deemed not salvageable, as determined by the PCO, need to remain in sealable plastic bags and labeled "BED BUG INFESTED" prior to disposal.
6. Cooperate with the owner or operator if temporary relocation is required (to a bed bug free location) while the infested room is inspected or treated by a PCO.

C. Bed bug notices for tenants of multi-unit dwellings

¹As of July 1, 2017, all new tenants must be provided a written notice providing information related to bed bug identification, behavior and biology, prevention and treatment, the importance of prompt reporting of suspected infestations, and the procedure to report a suspected infestation to the landlord. All other tenants must receive the notice by January 1, 2018. The document must be in at least 10-point font and should include the following:

Bed bug Appearance: Bed bugs have six legs. Adult bed bugs have flat bodies about 1/4 of an inch in length. Their color can vary from red and brown to copper colored. Young bed bugs are very small. Their bodies are about 1/16 of an inch in length. They have almost no color. When a bed bug feeds, its body swells, may lengthen, and becomes bright red, sometimes making it appear to be a different insect. Bed bugs do not fly. They can either crawl or be carried from place to place on objects, people, or animals. Bed bugs can be hard to find and identify because they are tiny and try to stay hidden.

Life Cycle and Reproduction: An average bed bug lives for about 10 months. Female bed bugs lay one to five eggs per day. Bed bugs grow to full adulthood in about 21 days.

Bed bugs can survive for months without feeding.

Bed bug Bites: Because bed bugs usually feed at night, most people are bitten in their sleep and do not realize they were bitten. A person's reaction to insect bites is an immune response and so varies from person to person. Sometimes the red welts caused by the bites will not be noticed until many days after a person was bitten, if at all.

Common signs and symptoms of a possible bed bug infestation:

- Small red to reddish brown fecal spots on mattresses, box springs, bed frames, mattresses, linens, upholstery, or walls.
- Molted bed bug skins, white, sticky eggs, or empty eggshells.
- Very heavily infested areas may have a characteristically sweet odor.
- Red, itchy bite marks, especially on the legs, arms, and other body parts exposed while sleeping. However, some people do not show bed bug lesions on their bodies even though bed bugs may have fed on them.

For more information, see the Internet Web sites of the United States Environmental Protection Agency and the National Pest Management Association.

D. Responsibilities of relocation, rental furniture, and public storage companies for the prevention, surveillance and control of bed bug infestations

Relocation specialists, rental furniture companies, and public storage facilities can harbor populations of bed bugs. For this reason, these industries should train staff to recognize signs of a bed bug infestation and have policies and procedures in place to respond to an infestation. These procedures are generally described above.

References

¹ [California Civil Code, Division 3
Sections 1954.600-1954.605](#)

https://leginfo.legislature.ca.gov/faces/codes_displayText.xhtml?lawCode=CIV&division=3.&title=5.&part=4.&chapter=2.8.&article

² [Section 1942.5](#)

https://leginfo.legislature.ca.gov/faces/codes_displaySection.xhtml?lawCode=CIV§ionNum=1942.5

CDPH adopted guidelines for bed bug control from the US Environmental Protection Agency, San Francisco Department of Public Health, and the Australian Environmental Pest Managers Association.

Revised September 2017