



WORKING THE BUGS OUT

Bed Bug Control—What Landlords and Tenants in Multi-Family Housing Need to Know in Arizona

Dawn H. Gouge, Carl Olson, Al Fournier & Paul Baker



In 2011 Arizona joined several other states enacting bed bug related legislation. The new legislation (SB 1306) assigns specific responsibilities to landlords and tenants in multi-family housing. This law does **not** apply to a single family residence. Under Arizona law, landlords are required to provide existing and new tenants with educational materials on bed bugs. Additionally, landlords are prohibited from knowingly leasing a bed bug infested residence. The legislation requires tenants to notify the landlord of a bed bug infestation and disallows them from knowingly moving bed bug infested materials into a residence.

Summary of the Arizona law

- **TENANTS** are required to notify landlords in writing or electronically of the presence of bed bugs.
- **TENANTS** are prohibited from moving items into the building if they are known to be infested with bed bugs.
- **LANDLORDS** Landlords are required to provide educational materials on bed bugs to existing and new tenants.
- **LANDLORDS** are prohibited from renting homes known to have active bed bug infestations.

The Arizona bed bug legislation can be read at: http://www.azleg.gov/FormatDocument.asp?inDoc=/legtext/50leg/1r/laws/0191.htm&Session_ID=102

Reflected in statute titles 33-1319; 11-269.11; 9-500.31; 36-601

LANDLORDS

- Shall not enter into a lease agreement if an apartment is known to be infested with bed bugs.
- Shall provide educational materials on bed bugs to tenants.
- Also in statute ARS 32-2325 (1) and (2) to do structural pest control, a person must have a business license and qualifying party license, or be a licensed pest management professional employed by a company with a business license and qualifying party license. Employees of political subdivisions (e.g. City municipality workers) need only hold an applicator license, and are not required to meet the business license and qualifying party license requirements. Thus, the additional requirement that the Landlord shall utilize only licensed Pest Management Professionals to remediate infestations.

Landlords should consider having a clearly written Bed Bug Protocol included within lease agreements.



General pest management service contracts may not include bed bug remediation. It may be advisable to hire an experienced Pest Management Professional to manage properties you are responsible for and to verify there are no bed bugs in recently vacated homes. If contracting with a bed bug detection dog service provider, it is advisable to confirm that the dogs and handlers are third-party certified by World Detection Dog Organization (WDDO), National



Entomology Scent Detection Canine Association (NESDCA) or similar evaluation agency.

TENANTS

- **Shall not** knowingly move bed bug infested items into an apartment.
- Shall provide notice to the landlord if bed bugs are suspected. Giving notice of a possible bed bug infestation may give the landlord permission to enter the home. If bed bugs are confirmed, the tenant should grant access to the premises to the Pest Management Professional involved in remediating the infestation.

If a notified landlord fails to inspect or respond, it may be necessary to mitigate a bed bug infestation. It would be advisable for the tenant to provide written notice to the landlord of the tenant's intention to remediate the infestation. The tenant may have to initiate the work to be done by a licensed Pest Management Professional, and submit to the landlord an itemized statement for the pest control services.

Before moving into an apartment, it may be advisable for tenants to hire an experienced Pest Management Professional to verify there are no bed bugs in your potential new home, as well as in your last home, including your personal belongings. This law does not create a right of action against a landlord. Tenants have to use the normal procedure of complaining and giving the landlord the opportunity to remedy the situation. Having an assessment



ALEX WILD

done before moving in may limit your liability for bed bug treatment costs. Avoid moving into infested apartments.

Single Family Residence

The landlord and tenant of a single family residence may agree that the tenant is responsible for bed bug mitigation. If you are a prospective tenant, please read your lease carefully so you understand your financial obligations under the agreement. Having your new home inspected before you move in could save you a lot of money.

IMPORTANT THINGS TO KNOW ABOUT BED BUGS

Bed Bug Basics

Bed bugs (*Cimex lectularius*) are blood-feeding insects that live in beds, and the cracks and crevices of furniture, walls, flooring, etc. Adult bed bugs are about a quarter of an inch in length (about the same length as an apple seed), oval in shape, and brown or reddish-brown in color. They are usually flat unless they have just had a blood meal. Bed bugs are generally most active during the night when they move between sleeping or stationary people and harborage areas (such as cracks and crevices). They do not have wings, and do not fly or jump, but they are able to crawl quite quickly when disturbed. Bed bugs prefer to feed on humans, but can feed on pets and may be found in pet bedding in an infested home.



ALEX WILD

Bed bugs have piercing-sucking mouthparts and feed on blood. However, they are not known to transmit disease-causing organisms.

Immature bed bugs look the same as adults, only smaller. Newly hatched bed bugs are virtually colorless, and gradually get darker as they grow. The adults mate, and females lay white eggs that resemble grains of salt that are often stuck to surfaces. They can be laid singly or in clusters.

Bed bugs can be found in very clean locations, unlike German cockroaches that are associated with unsanitary conditions. Bed bugs are expert hitch-hikers and anyone can inadvertently acquire them. Because they are most often found in places where people sleep, they occur most commonly in homes, hotels, shelters, dorms, barracks, and long-term care facilities. While bed bug sightings can occur

ALEX WILD



in all the places people go, they are usually found breeding (sometimes in high numbers) in places where people sleep or are stationary for long periods of time.

Most bed bug activity occurs after dark, but they will feed during the day if they are hungry and have a stationary host. During the day you can see the tell-tale signs that indicate their presence. A flashlight and a magnifying glass are useful tools when inspecting for bed bugs. Signs of this pest include:

Actual bed bugs

Look closely in the seams of mattresses, box-springs, and in the joints of furniture in and close to sleeping areas.

Bed bug excrement

Bed bug frass (poop) looks like dark spots or rusty stains on mattress fabric or bedding. Harborage areas can be indicated by spotting on walls or furniture.

D. H. GOUGE



Bed bug exoskeleton molts

Growing bed bugs molt, leaving their old exoskeleton behind. The molts look like transparent bed bugs.

D. H. GOUGE



Blood

Crushed bugs will leave a splat of blood on sheets. Using white or pale colored sheets helps verify a suspected infestation in a home.

Bed bugs have a distinct musty, sweet odor; some people are reminded of raspberries, while others are reminded of coriander. In relatively light infestations there may be no noticeable odor at all.

Bites on exposed skin after sleeping

People experience a range of reactions to the bites; some have no reaction, while others experience a reaction to the saliva injected while the insects feed. People may develop itchy, even painful welts immediately, or up to two weeks later. Repeated bites tend to generate more severe reactions, and heavy infestations of bed bugs can cause anemia in children and the elderly. Secondary infections occur due to the scratching of bites.

Avoid scratching! Over-the-counter antihistamines and topical hydrocortisone creams help reduce the irritation.

Finding bug bites does not mean you have bed bugs in your home. There are many things that cause itchy bumps and welts to form, but if you notice bites on exposed skin after sleeping, take a moment to inspect sleeping areas for the other signs.

Preventing Bed Bugs



Don't Panic! All bed bug infestations can be remediated successfully when the appropriate management steps are followed.

Think twice before using retail pesticides and other chemicals! Misuse of these products could injure your family and yourself. Certain products make infestations far worse by encouraging the movement of bugs into wall voids, making remediation more challenging and expensive.



There are ways to minimize the chances of bed bugs arriving in your home in the first place; it is highly recommended that you take the following precautions:

- **Do not** be tempted to move furniture or items from the curb-side or from a dumpster into your home. Even if items look perfect. It's **not** worth the risk!
- **Do not** move in second-hand furniture, **especially** mattress or box-spring items, unless you are absolutely certain the items come from a bed bug free location. If you cannot be 100% certain the items have never been exposed to bed bugs, don't run the risk!
- **Inspect** rented furniture very carefully before accepting it into your home. Avoid renting bedroom furniture if possible.
- When travelling, check motel/hotel rooms before unpacking or sleeping (at a minimum check the mattress, box-spring, and behind the headboard for any signs of bed bug activity). Even if you do not find evidence of bed bug activity, avoid placing luggage on the bed or on the floor near the bed. Upon returning home, machine-wash and dry all clothing on a high heat or dry clean. Carefully check the outside and inside seams of luggage with a flashlight, looking for any movement. Store luggage in the garage or outdoor storage area.
- **Reduce clutter.** An uncluttered home is much easier to monitor and remediate.
- Wash bedding weekly and dry items on a high heat for an additional 40 minutes after the items are dry.
- Avoid moving bedding in and out of other locations as much as possible. If you take blankets and pillows from home to hotels, school, child care facilities, other homes, etc. wash and dry everything immediately upon returning.
- **Know** what is happening in your building. Bed bugs can move between homes in multifamily buildings.
- Shared articles such as vacuums, wheel chairs, etc. can harbor bed bugs. Inspect carefully and regularly.
- Bed bugs are sensitive to extreme temperatures in all of their life-stages. So tossing all clothing/bedding in a hot (140°F) dryer for 40 minutes is an effective way of killing them. If you suspect you have been exposed to bed bugs, rinse and leave footwear outside to dry. Inspect bags and items entering the home. Wash and dry clothes on a high

heat, leaving dry clothes in the dryer for an additional 40 minutes on a high heat, or dry clean. Normal showering will remove bed bugs from your person.

Managing Your Home

- Inspect for bed bugs frequently, especially when changing bedding each week. Bed bugs hide in cracks less than 1 mm wide. Initially they are found in the seams, folds, and joints of mattresses, box-springs and headboards. As they breed and the population increases they can be found in areas farther from the bed (electrical outlets, floor cracks, fire alarms, baseboards, furniture, door frames, under carpeting, behind picture frames, in drapery folds and behind loose wall paper).
- Consider placing bed bug monitoring devices such as ClimbUp® Interceptor traps under bed legs. There are a number of bed bug traps available, and the simplest, relatively inexpensive ones work very well.
- Vacuuming is an effective way to remove bed bugs and the dirt that provides them shelter. Vacuum weekly (at a minimum) and discard bags or canister content into outdoor receptacles.
- Fit mattresses and box-springs with encasings designed to prevent the movement of bed bugs in and out of bed sections. If you can only afford one encasement, cover the box-spring, as this is the most favorable place for bed bugs. The higher quality encasements have been tested, and shown to be very effective. If an encasement tears, it should be replaced.
- Eliminate harborage opportunities by sealing cracks and crevices with a silicone-based sealant; glue down loosened wallpaper edges.
- Reduce clutter, especially in bedrooms.
- Minimize use of cardboard boxes for storage.



D. H. GOUGE



ALEX WILD



If Bed Bugs Arrive Do Not Panic!

Bed bugs are a growing problem. Early detection and involvement of an experienced Pest Management Professional will help to minimize costs, uncomfortable bites, and stress.

The “Do not” list below references things that people tend to do that inadvertently make infestations spread and ultimately far more difficult to control. The “Do” list offers ways to safely manage the problem until a Pest Management Professional can eradicate the infestation.



ALEX WILD

Do not

- **Do not** move items in or out of infested rooms. If you need to remove clothing, wash and dry the items before using. Essential non-washable items should be inspected carefully before removal from the area. Clock-radios and other electronic items should not be removed at all. In general, move as little as possible.
- **Do not use foggers or bug bombs; many of the retail product options are not effective against bed bugs, and may even make the problem worse. Professionals use very specialized heat, cold, and/or professional chemical treatments which are only available to licensed professionals.**
- **Do not** move infested beds or furniture outside. Items have to be wrapped, **marked as dangerous or bed**

bug infested, and discarded in a manner that avoids spreading bed bugs throughout your home or to other people’s homes. Unmarked items should not be left accessible to other residents. Contact your facility manager, they may be helpful coordinating the wrapping and disposal of infested items.

- **Do not** host visitors while you are battling bed bugs. They may return to their own home with hitchhikers that set up residence in a new location.
- **Do not** simply move into another home in order to get away from the bed bugs. There will be bed bugs on the articles, furniture and clothes you take with you. Additionally, bed bugs can survive for months without a blood meal and some may still be alive even after an extended absence.

If you have to vacate your home, take as little as you can with you. Launder clothing and washable items immediately. Showering will effectively remove bed bugs from your person.



Do

- **Do** report bed bug sightings to property managers as soon as possible. Bed bugs can multiply rapidly, and the sooner they are reported, the easier they are to control.
- **Do** follow the instructions given by Pest Management Professionals very carefully.
- **Do** wrap and mark infested items and articles in plastic bags and throw out in outdoor dumpsters.
- **Do** launder infested washable items and dry on a high heat for 40 extra minutes after they are dry.
- **Do** soak delicate fabrics in warm water and laundry soap for several hours before rinsing.
- **Do** cut, mark and plastic wrap mattresses and irreparably damage furniture so other people are not tempted to move infested things into another home.
- **Do** vacuum frequently and immediately remove the vacuum bag or empty the canister into a plastic bag and discard in an outdoor dumpster.
- **Do** carefully inspect the guest room and launder towels and linens after visitors depart.
- **Do** place small, delicate or electronic items in the freezer for 6 days.

Additional Information Resources

EPA Bed Bug Information
www.epa.gov/bedbugs

Guidelines for Prevention and Management of Bed Bugs in Shelters and Group Living Facilities
http://www.nysipm.cornell.edu/publications/bb_guidelines/

National Pest Management Association Best Management Practices for Bed Bugs
<http://www.bedbugbmps.org/>

National Pest Management Association International
<http://allthingsbedbugs.pestworld.org/>

Central Ohio Bed Bug Task Force
<http://centralohiobedbugs.org/index.html>

Bed Bug Central
<http://www.bedbugcentral.com/>

Joint Statement on Bed Bug Control in the United States from the U.S. Centers for Disease Control and Prevention (CDC) and the U.S. Environmental Protection Agency (EPA) http://www.cdc.gov/nceh/ehs/publications/bed_bugs_cdc_epa_statement.htm



ALEX WILD

Bed bugs have been with us throughout human history, remember:

- Bed bugs can happen to anyone!
- Bed bugs are **not** known to transmit disease organisms.
- **Do not** abuse pesticide products or chemicals; such actions can result in serious physical harm or death.
- **Every** situation can be resolved successfully.

Any products, services or organizations that are mentioned, shown or indirectly implied in this publication do not imply endorsement by The University of Arizona.

Issued in furtherance of Cooperative Extension work, acts of May 8 and June 30, 1914, in cooperation with the U.S. Department of Agriculture, Jeffrey C. Silvertooth, Associate Dean & Director, Economic Development & Extension, College of Agriculture and Life Sciences, The University of Arizona.

The University of Arizona is an equal opportunity, affirmative action institution. The University does not discriminate on the basis of race, color, religion, sex, national origin, age, disability, veteran status, or sexual orientation in its programs and activities.



THE UNIVERSITY OF ARIZONA
COLLEGE OF AGRICULTURE AND LIFE SCIENCES
TUCSON, ARIZONA 85721

DAWN H. GOUGE

ASSOCIATE SPECIALIST AND ASSOCIATE PROFESSOR - URBAN ENTOMOLOGY

CARL OLSON

ASSOCIATE CURATOR, INSECTS

AL FOURNIER

IPM PROGRAM MANAGER AND ASSOCIATE DIRECTOR OF THE ARIZONA PEST MANAGEMENT CENTER

PAUL BAKER

URBAN EXTENSION ENTOMOLOGIST

CONTACT:

DAWN H. GOUGE

dhgouge@cals.arizona.edu

This information has been reviewed by University faculty.
cals.arizona.edu/pubs/insects/az1563.pdf

Other titles from Arizona Cooperative Extension can be found at:
cals.arizona.edu/pubs