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***BED BUG ABATEMENT &
PREVENTION GUIDE***
***for Establishment
Owners/Operators and Staff***

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USING THIS GUIDE

There are steps that can be taken to prevent bed bugs from infesting your establishment. When bed bugs are present, they can be safely controlled. This guide will help you:

1. Learn more about bed bugs and how they thrive.
2. Prevent bed bugs from infesting your establishment.
3. Safely rid your establishment of bed bugs if they do occur.
4. Select and work with a pest control professional.

RECOGNIZING BED BUGS

Appearance

Bed bugs are small insects that feed mainly on human blood. A newly hatched bed bug is semi-transparent, light tan in color, and the size of a poppy seed. Adult bed bugs are flat, have rusty-red-colored oval bodies, and are about the size of an apple seed. Bed bugs can be easily confused with other small household insects, including carpet beetles, spider beetles and newly hatched cockroaches (nymphs).

Markings, droppings and eggs

Blood stains, droppings and eggs can be found in several locations including:

- Mattress seams and tufts, sheets, pillow cases and upholstered furniture.
- Crevices and cracks in furniture.
- Baseboards of walls.

Bites

Some people do not react to bed bug bites. But for those who do, bite marks may appear within minutes or days, usually where skin is exposed during sleep. They can be small bumps or large itchy welts. The welts usually go away after a few days. Because the bites may resemble mosquito and other insect bites, a bump or welt alone does not mean there are bed bugs.

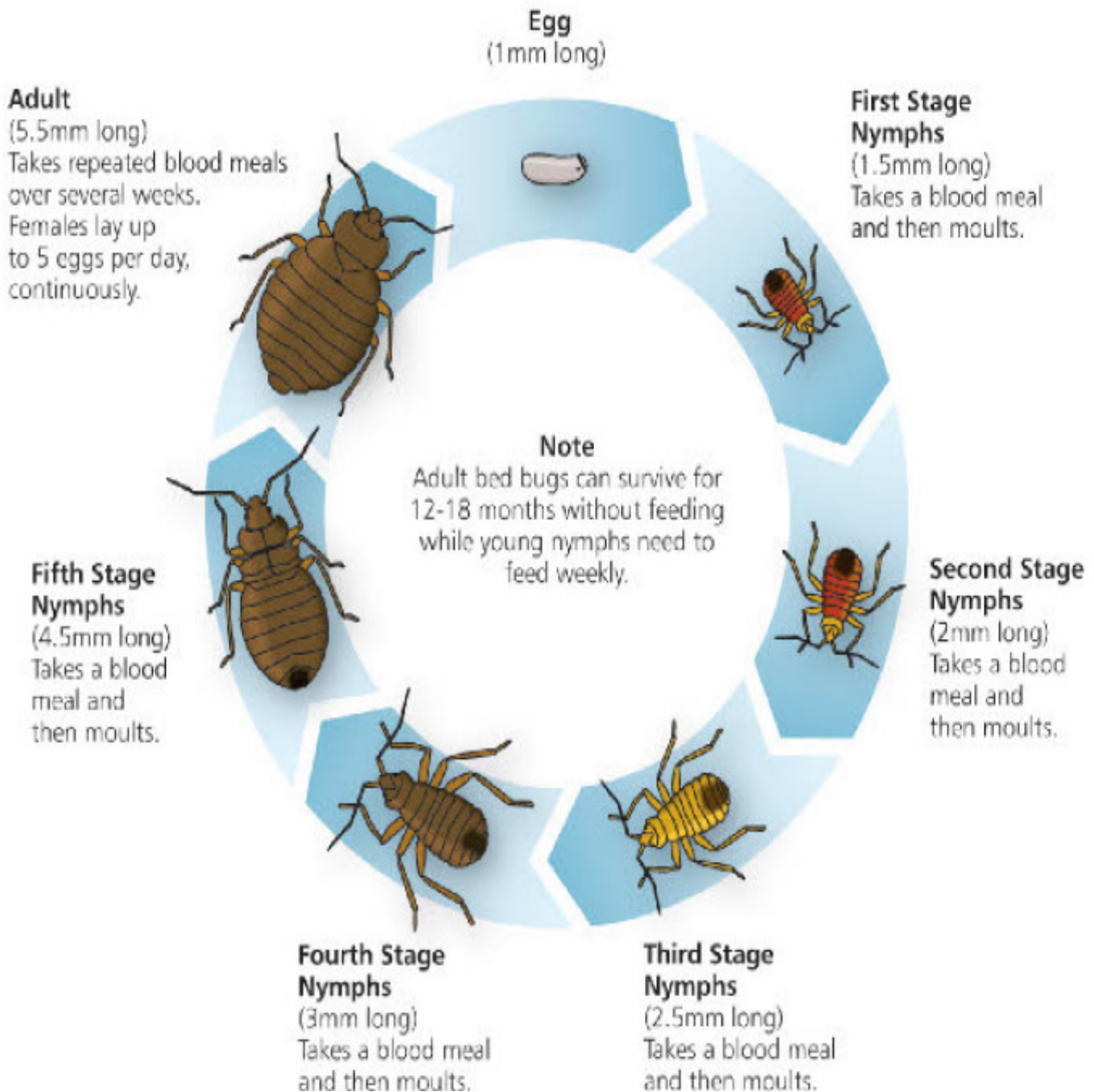
THE HEALTH EFFECTS OF BED BUGS

Although bed bug bites are a nuisance, bed bugs are not known to spread disease.

- Bed bug bites can be very itchy and irritating. Most welts heal in a few days but in unusual cases, the welt may persist for several weeks. Usually an anti-itching ointment will help, but if bites become infected, people should see their doctor.
- The anxiety about being bitten can lead to sleeplessness, which can affect one's well-being. Properly responding to bed bugs helps to keep anxiety in check.
- Some people become so desperate that they use illegal or excessive amounts of pesticides that can lead to poisonings. This guide provides advice on how to get rid of bed bugs safely.

Life Cycle of the Bed Bug

Cimex lectularius



The life span of a bed bug most commonly ranges from four to six months. However, some bed bugs may live up to a year under cool conditions and with no food.

PREVENTING BED BUGS FROM INFESTING YOUR ESTABLISHMENT

Bed bugs can enter establishments by latching onto used furniture, luggage and clothing, and by traveling along connecting pipes and wiring.

- Never bring bed frames, mattresses, box springs or upholstered furniture found on the street into your establishment.
- Check all used or rented furniture for bed bugs.
- When traveling, inspect the bed and furniture. Keep suitcases off the floor and bed, and inspect them before you leave.
- If you suspect you have been around bed bugs, immediately wash and dry your clothing on hot settings or store it in a sealed plastic bag until you can.
- Seal cracks and crevices with caulk, even if you don't have bed bugs. This will help prevent bed bugs from coming in.

INSPECTING FOR BED BUGS

Look for bed bugs, blood stains, droppings and eggs (using a flashlight and a magnifying glass). Begin looking in an area within 10-20 feet of where a person sleeps or sits. That's how far a bed bug usually travels. Keep a written record of every room and location where you find signs of bed bugs. Share this record with a pest control professional.

Check mattresses, box springs, bed frames and bedding

- Check the top and bottom seams, tufts and any rips in the covers of mattresses and box springs.
- Avoid the use of wood-framed beds, use metal bed frames.
- Look underneath the bed and along the bed frame and headboards.

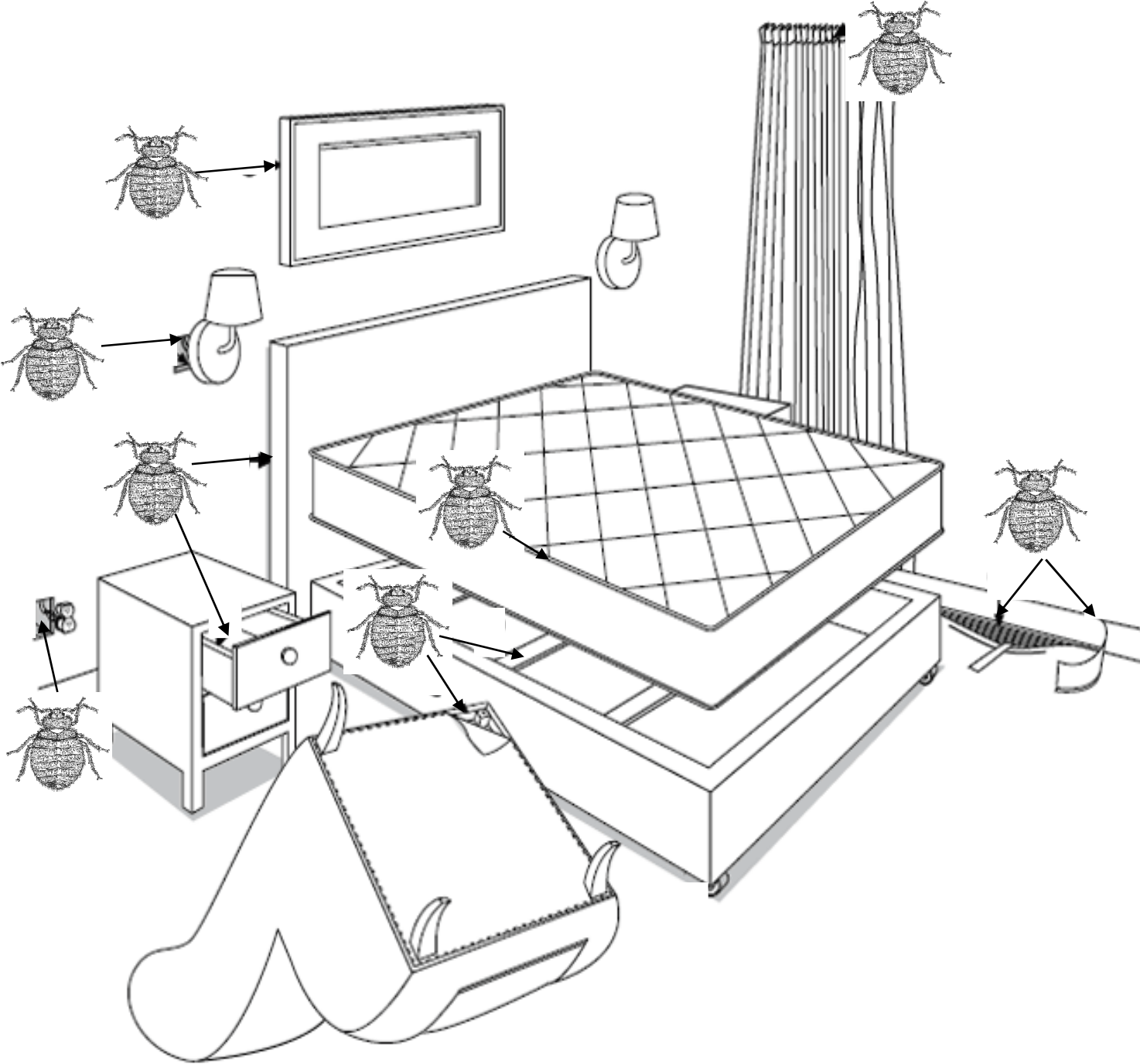
Check cracks and crevices in bedroom furniture, floor boards and baseboards, windows and door frames

- Use a flash light to inspect cracks and crevices of furniture, windows and door frames.
- Swipe a putty knife or playing card into cracks and crevices to force bed bugs out. A hot blow-dryer on a low setting will also work. If live bugs do come out, crush them with a paper towel and throw them away in a sanitary manner outside your establishment.
- Remove drawers from furniture and check the inside, top and bottom, joints and even screw holes.
- Remove and check zippers, seams and tufts in cushions of upholstered furniture, and their frames.

Check walls and wall hangings

- Using crevice tools, check paintings, posters, pictures and mirrors.
- Check cracks in plaster and peeling wallpaper.
- Inspect the face plates of electrical outlets and light switches.
- Look in phones, clocks, smoke detectors and toys.

COMMON HIDING PLACES FOR BED BUGS



CHOOSING AND WORKING WITH A PEST CONTROL COMPANY

Bed bug infestations usually require the services of well-trained, licensed pest management professionals, also called exterminators. There are many pest control companies and licensed pest professionals in the Austin/Travis County area. Not all are well trained in managing bed bugs. To get rid of bed bugs, you must choose the right company, be clear about what you want done and monitor performance.

- Find a company through referrals, directories and professional associations.
- Interview several companies before choosing. Ask about their training and approach to controlling bed bugs. Make sure they follow the procedures described in this guide.
- Agree on a service plan and its cost. Expect at least two treatment visits and a third follow-up visit to confirm that bed bugs have been eliminated. Severe infestations or cluttered apartments may take more visits to eliminate bed bugs.

A good company will:

- Inspect your property before giving you a price quote or applying pesticide.
- Give you a written inspection report, and an action plan of how to prepare for treatment and prevent further infestation.
- Base quotes on actual findings, not flat fees. The cheapest services are rarely the best.
- Visit often until the work is complete.
- Employ qualified, well-trained pest management professionals.
- Educate you on how to prevent bed bugs.
- Work with you until the bed bugs are gone.

IMPORTANT: any person applying pesticide(s) for or while employed by an establishment operator/owner must hold a Non-Commercial Applicator License, as required by the Texas Department of Agriculture.

REGARDING THE USE OF PESTICIDES

Bed bug infestations usually require the use of pesticides. Only professionals should apply pesticides for bed bugs. Foggers and bug bombs are not effective against them. Ask the pest management professional to:

- Use the least-toxic pesticide labeled for bed bugs that will be effective.
- Follow all instructions and warnings on product labels.
- Tell you when it's safe to re-enter a treated room.
- Never spray the top of mattresses or sofas, and if needed, to use only small amounts of pesticides on their seams only.

WHAT CAN BE DONE TO SUPPORT THE WORK OF A PROFESSIONAL

Everyone should learn how to identify bed bugs and inspect for them. Cleaning and disinfecting will help to reduce bed bugs and their spread but may not get rid of them totally.

Tools you can use:

- Bright flashlight
- Small mirror, ideally one with a handle, available from hardware stores
- Magnifying glass
- Blow-dryer
- Paper towels
- Vacuum with crevice tool, brush and plenty of vacuum bags

- Putty knife, playing card as a crevice tool
- Garbage bags
- Plastic packing tape, cockroach sticky traps or mouse glue boards
- Bucket of soapy water and sponge

Trapping and killing bed bugs

Force bed bugs out of cracks and crevices with a putty knife or an old playing card, or with hot air from a blow-dryer on low setting. Catch them with sticky packing tape or crush them in paper towels. The heat from blow-dryers will kill bed bugs after 30 seconds of continuous contact.

Cleaning and disinfecting

Get rid of clutter to reduce places bed bugs can hide. After checking them for bed bugs, consider putting non-essential belongings into storage until the bed bugs are gone from your establishment. Check all items again before returning.

- Wipe off dead bugs, blood stains, eggs and droppings with hot soapy water.
- Wash all items showing bed bug stains in hot water (140° F) and dry on the highest setting for at least 20 minutes. Other clean items suspected of having bed bugs should be placed in a hot dryer for at least 20 minutes to kill bed bugs. After drying store items in sealed plastic bags until you are sure you have gotten rid of bed bugs.
- Vacuum carpets, floors, bed frames, furniture, cracks and crevices daily, using the brush and crevice tools. Empty the vacuum or seal and dispose of its bag outside of your establishment after each use.
- Enclose infested mattresses and box springs in a cover that is labeled “allergen rated”, “for dust mites” or “for bed bugs” for at least a full year. Periodically check for rips or openings and tape or seal as they occur.

Sealing cracks and crevices

- Repair cracks in plaster, repair or remove any loose wallpaper and tighten light switch covers.
- Apply caulk to seal crevices and joints in baseboards and gaps on shelving or cabinets.

Getting rid of infested items

- Usually, it is not necessary to get rid of furniture or bedding at the first signs of bed bugs. Cleaning and enclosing is often adequate.
- Box springs should only be discarded if they cannot be covered and are heavily infested.
- Use plastic sheeting (shrink /pallet wrap) or place securely in plastic bags any items to be thrown away. Label with a sign that says “infested with bed bugs.”
- Provide tenants with information about bed bugs. Share this guide.
- Encourage everyone to report bed bugs as soon as they know of a problem.
- Notify tenants, and inspect all units adjacent to, above and below apartments found to have bed bugs.
- Hire a pest management professional to treat for bed bugs. Be wary of companies that make unrealistic claims that bed bugs can be controlled with one visit.
- Help tenants if they cannot move furniture themselves or need help to get rid of clutter.
- Give advance notice of the planned use of pesticides.
- Inspect upon vacancy and if necessary treat units to ensure they have no bed bugs or other pests before renting.

COMMON METHODS OF BED BUG CONTROL

- **Pesticides** - Often requires multiple visits due to pesticide resistance and dispersal of the bed bugs. Non-residue methods of mattress treatment are desired in place of contaminating mattresses with insecticides.
- **Physical isolation** - Isolation of humans is attempted with numerous devices and methods including zippered bed bug certified mattress encasements, bed bug tents, bed-leg moat devices, and other barriers. Pest management companies often use mattress and furniture encasements in conjunction with regular pesticide control methods.
- **Disposal of contaminated belongings** - Disposal of items such as mattresses, box springs, couches, etc., is a costly process and rarely solves the problem. Instead, new furniture is usually infested.
- **Vacuumping** - Vacuuming helps reduce bed bug infestations but does not eliminate bed bugs hidden inside of materials.
- **Clothes dryer** - A clothes dryer can be used for killing bed bugs in clothing and blankets. Continual treating of materials in this fashion is labor intensive and by itself does not eliminate the infestation.
- **Steam** - Steam treatment can effectively kill all stages of bed bugs. However, bed bugs hide in a variety of places, making steam treatment very tedious, labor intensive, and time consuming.
- **Cold treatment** - Freezing equipment can be used to kill pests. As with approaches such as vacuuming and steaming, freezing sprays may not reach bed bugs that are hidden inside walls, furniture, or appliances.
- **Room or building heat treatment** - involves raising room temperatures to or above the killing temperature for bed bugs, which is at least 113 °F. Heat treatments are generally carried out by professionals and may be performed for a single dwelling or for an entire building. A drawback to heat treatment is the high expense and amount of time required to bring core temperatures high enough to effectively kill bed bugs that may have taken refuge within materials.

INTEGRATED PEST MANAGEMENT PLAN (IPMP)

- Integrated pest management (IPM) is a continuous system of controlling pests which takes advantage of all appropriate pest management options and emphasizes prevention. It includes a coordinated effort among establishment operators/owners, tenants and pest management professionals.
- An IPMP can be as simple as a one page fact sheet to address each pest problem you have in your establishment, or as complex as a book covering all aspects of pest biology, employee/tenant policies, and guidelines.
- IPMP's should be created in cooperation between a licensed pest management professional and the establishment owner/operator and distributed to staff and tenants.

IMPORTANT MESSAGES ABOUT BED BUGS

- Learn to identify the signs of bed bugs.
- Dirty living conditions do not cause bed bugs, but cleaning and removing clutter will help control them.
- Anyone can get bed bugs. Seek help immediately if you find them.
- Sealing cracks and small holes will help to reduce hiding places and prevent bed bugs from crawling between apartments.
- Use an Integrated Pest Management Plan as necessary via cooperation among the establishment owner/operator, staff, tenants and a pest management provider. Getting rid of bed bugs requires everyone's involvement.
- Do not use pesticide bombs or foggers to control pests. They can make conditions worse.
- Be pro-active in taking action to prevent the re-introduction of bed bugs once abatement has been achieved.
- Do not simply vacate once building and occupy in another building as a means of avoiding a bed bug infestation, as this promotes the spread of bed bugs to the new location.

Please report complaints regarding bed bug infestations at hotels, motels, and other establishments in which sleeping accommodations are offered for the public can be reported to the Austin/Travis County Health & Human Services Department via:

Email: EHSD.Service@austintexas.gov

Phone: (512) 978-0300 during normal business hours or
(512) 978-0375 outside of normal business hours