

GTAA Bed Bug Control Protocol

BED BUG PREVENTION

Due to the mobile nature of bed bugs, their prevention is difficult if not impossible. Bed bugs are found in hospitals, public transportation, hotels, airplane cargo, etc. Because of the many ways bed bugs can be introduced, it is often difficult to identify their exact mode of introduction.

If a regular visitor (friend, family member, boy/girlfriend, etc.) has a problem that he/she is unaware of, this could contribute to the continuous re-introduction of a problem. Other sources of bed bug infestations are from purchasing used clothing and used furniture and these items should be closely examined before being introduced to one's home.

Once a bed bug infestation is introduced, it is critical that the home be treated in a timely manner, before the infestation levels grow (potentially requiring multiple treatments) and spread to other areas of the home. All areas of the home should be treated preventatively, regardless of where the actual sightings take place. For this reason, it is important to educate people how to quickly identify a bed bug problem in their home.

IDENTIFICATION

#1 THE BITE

At the beginning of an infestation, bed bugs may be loyal to their host and may only attack a single person in a household night after night.

The bites are generally the size of a mosquito bite and may appear anywhere on the body (head, torso, arms, legs, etc.). They itch and/or burn and form a scab "head" after a couple of days which may bleed when scratched.

There are three main biting bugs in North America. Flea bites are small and generally appear in clusters around the ankles. Spider bites are smaller and generally appear in groups of "3." Mosquito bites are generally seasonal and usually do not scab and bleed unless they are scratched. If these three pests can be eliminated, you can assume you are dealing with bed bugs. A pest control professional/doctor can usually identify a bed bug bite.

#2 THE EVIDENCE

Once a bed bug problem begins to fester, the bedbugs will leave trace evidence of nesting debris (fecal matter that resembles black pepper) in cracks and seams of areas in the home. Most often, this can be found in the seams of the mattress and box-spring of the bed. As the problem progresses, this evidence

can be found in the frame of the bed, baseboards of the room, electrical sockets, and work their way up to ceiling corners/moldings, then to furniture, etc. As a problem progresses, it will begin to move to adjacent rooms and even possibly to adjacent units (of an apartment/condo setting).

Also, blood marks (spots) on the bed mattress and sheets may also be present as a result of a bed bug feed.

#3 THE BED BUG

The easiest way to identify a bed bug is if one is seen. Bed bugs are most active at night and generally are not seen and they hide away in dark cracks and seams and are not in plain view unless a problem has become quite severe.

Bed bugs are rust coloured, oval shaped insects and may differ in size and colour depth (more red or more brown) depending on the stage of their life cycle and how recently they have had a feed.

CONTROL

Bed bug control is designed based on the life cycle of the bed bug, the severity of the bed bug infestation and any treatment limitations that the pest control company may face.

There is currently much discussion and debate on the best way to treat a bed bug infestation, and this is causing confusion for people who are attempting to approach a bed bug problem. This is especially true as more and more individuals are identifying a business opportunity with the increase of bed bug infestations and are profiting from the panic and angst this problem is creating in the community. It is important to do your research and come up with an appropriate, effective and safe plan of attack before a problem takes place.

UNDERSTAND THE LIFE CYCLE

In order to come up with a control approach, it is important to understand the life cycle of the bed bug.

Bed bugs can live up to a year. Females will lay up to 500 eggs in a lifespan. Once a mass of eggs is deposited (2-8 eggs at a time), they will hatch within 6 to 12 days. The bed bug will go through 5 moults before becoming an adult (32-48 days) and will actively feed off humans between each moult.

Therefore, the most effective approach aims at killing all adult bed bugs and attacking any eggs that may be present before the hatching/moulting period takes place.

CONTROL OPTIONS TO CONSIDER – PROS & CONS

TOOL	HOW IT WORKS	PROS	CONS	RECOMMENDED BY SPC? YES or NO
Dog sniffers	Claim to be able to sniff-out an infestation.	Claim to be 95% effective in the proper environment	Requires pristine conditions/environment in order to be effective. Do not treat a bed bug infestation, only identify that a problem exists under limited conditions. Costly approach to problem identification.	Not recommended as this approach does not treat a problem, and there are easier, less timely, less expensive and more effective methods to identify that an infestation exists.
TOOL	HOW IT WORKS	PROS	CONS	RECOMMENDED BY SPC? YES or NO
Steam Application (heating applicators)	Steam application to harbourage areas for the bed bug.	High heat steamers will kill off bed bugs and eggs when applied directly to the bed bug and/or egg.	Contact kill – if you do not apply directly to the bug/egg, this approach will not work. Limitations to application areas – may damage fabrics, electronics, furniture, etc. There is a “Flushing” concern with the risk of spreading the bed bugs to other areas in the unit or adjacent units with this method. Can damage furniture When this service is added to a treatment approach it can be very costly.	Recommended if in conjunction with chemical application either a few days prior to treatment or a minimum of 2 weeks post treatment as to not weaken the residual effectiveness of the insecticide. May be applied by home owner – not necessary to pay a professional to do this.

TOOL	HOW IT WORKS	PROS	CONS	RECOMMENDED BY SPC? YES or NO
Carbon Dioxide Application (freezing applicators)	Carbon Dioxide application to harbourage areas for the bed bug.	Extreme cold will kill off bed bugs and eggs when applied directly to the bed bug and/or egg.	<p>Contact kill – if you do not apply directly to the bug/egg, this approach will not work.</p> <p>Limitations to application areas – may damage fabrics, electronics, etc.</p> <p>There is a “Flushing” concern with this method.</p> <p>When this service is added to a treatment approach it can be very costly.</p>	Recommended if in conjunction with chemical application either a few days prior to treatment or a minimum of 2 weeks post treatment as to not weaken the residual effectiveness of the insecticide.
TOOL	HOW IT WORKS	PROS	CONS	RECOMMENDED BY SPC? YES or NO
Trapping devices (glue boards, noise, other attractants)	Devices are placed systematically (usually around the bed) to trap the bed bugs.	<p>Trapping the bed bugs will reduce the population.</p> <p>Glue traps are not expensive.</p>	<p>Contact kill – the bed bugs must leave the comfort of their dark crack crevices and locate the trap in order to get caught.</p> <p>This approach will not attack the eggs.</p> <p>Mechanical traps have cross-contamination risks and are costly.</p>	<p>Mechanical devices not recommended as a result of cross contamination risks and cost.</p> <p>Glue traps are not recommended as a treatment approach, however, may be recommended to identify that a problem exists, to identify infestation levels or treatment progress.</p> <p>Glue traps may offer a resident peace of mind after a treatment has taken place as they are non-chemical and may remain under a bed to monitor the existence/</p>

				nonexistence of a bed bug infestation.
TOOL	HOW IT WORKS	PROS	CONS	RECOMMENDED BY SPC? YES or NO
Vacuum	Vacuumping cracks and crevices and other harborage areas of a home to remove bed bugs and their eggs	Vacuumping the bed bugs and their eggs will reduce the population.	Contact kill – if you do not apply directly to the bug/egg, this approach will not work. When this service is added to a treatment approach it can be very costly.	Vacuumping is not recommended as a treatment approach, however, is recommended to be done in conjunction with a chemical treatment application approach.
TOOL	HOW IT WORKS	PROS	CONS	RECOMMENDED BY SPC? YES or NO
Certified mattress & box-spring Covers	Mattress covers designed to trap the bed bugs and their eggs and prevent and infestation from growing.	Mattress covers will trap bed bugs and eggs that are located on the mattress/box-spring, therefore preventing these bed bugs from infesting other areas of the unit. Mattress covers may offer relief from bites prior to a treatment. In-expensive (\$30-\$60/unit)	Mattress covers only trap the bed bugs and do not treat the bed bugs. Bed bugs will continue to fester within the mattress cover and other areas of the unit will not benefit from this treatment.	Mattress covers are not recommended as a treatment approach, however, may be recommended to offer relief to residents suffering from significant bites. These covers are best when used post treatment or as a preventative measure.
TOOL	HOW IT WORKS	PROS	CONS	RECOMMENDED BY SPC? YES or NO
Dust Application (Diatomaceous Earth, etc.)	Dust Treatment applications used to attack bed bugs	Effective for the treatment of bed bugs. Eggs may be resistant to this treatment. These applications have residual effectiveness.	There are application limitations as the application of dust to the surface of a bed or any other “out in the open” area is not recommended for health reasons.	Recommended in conjunction with other chemical insecticide treatment application approaches to appropriate areas (electrical areas and wall voids).

		<p>This application is effective for wall voids and other areas to reduce risk of cross contamination.</p> <p>This application is effective for areas not conducive to liquid insecticide application (electrical panels, etc.).</p>		
TOOL	HOW IT WORKS	PROS	CONS	RECOMMENDED BY SPC? YES or NO
Residual Insecticide Application	The treatment of liquid spray insecticide to kill bed bugs and their eggs.	<p>Effective as this approach will flush the bed bugs out of their hiding places while offering an immediate contact kill to bed bugs and eggs along with residual effectiveness.</p> <p>Cost effective.</p>	<p>There is a “Flushing” concern with this method when there are high levels of infestations.</p> <p>High degree of resident preparation required.</p>	This approach is recommended as Standard Pest Control’s main treatment approach for Bed Bugs.

ABC PEST CONTROLS COMPANY’S TREATMENT APPROACH

In ABC Pest Control’s opinion and experience, the key to the effective treatment of a bed bug infestation is an appropriate residual insecticide treatment application (liquid spray, aerosol and dust), to a unit that is properly prepared for this treatment.

This approach is the most efficient and cost effective way to treat an infestation with a single treatment application while minimizing the risk of cross contamination.

In situations when higher levels of infestations are identified, or when the source unit is not clear, box treatments or inspections may be recommended.

TREATMENT DESCRIPTION

This treatment includes the application of liquid spray insecticide to the cracks and seams of all mattresses & box-springs, pillows, couches, dressers, night tables and baseboards and closets in all rooms. A space spray is also used to kill adult insects living in draperies, behind pictures, wallpaper, etc. and to fabrics and furniture where the spray application is not appropriate. This treatment also includes a dust insecticide application to all wall sockets, electrical areas and wall voids where accessible.

PREPARATION

Please see attached Permission to Enter (P.T.E.) Form.

ABC PEST CONTROL COMPANY BED BUG SERVICE PRICES

As a result of different circumstances (residential vs. commercial, level of infestation, preparation limitations, budget, etc), a specific plan must be designed and quoted on an individual basis to best suit the specific needs of the customer. ABC Pest Control Company is happy to discuss treatment options and offer a customized plan and quote free of charge.

The following is a framework of the recommended treatment for bed bugs (in order);

1. INSPECTION/PROBLEM IDENTIFICATION SERVICE (IDENTIFY A BITE AND CONDUCT UNIT INSPECTION)
2. RESIDUAL CHEMICAL TREATMENT APPLICATION (SPRAY/DUST/AEROSOL)
3. MATTRESS COVERS
4. VACUUMING SERVICE
5. STEAM CLEANING
6. CARBON DIOXIDE & OTHER "FREEZING" SERVICE
7. DOG SNIFFING SERVICE

To: Owners/Residents

RE: BEDBUG CONTROL

Preparation Instructions and Permission to Enter

- In order to treat units for bed bugs, it is essential that your unit be properly prepared the night **prior** to our arrival.
- You must vacate your apartment prior to the treatment and stay out for a minimum of **3 hours** (this includes children and pets). If you are pregnant or asthmatic, you may wish to remain out of your unit longer.
- Service will be carried out between the hours of **9:00 AM and 4:00 PM**.

The treatment includes insecticide application to the cracks and seams of all mattresses, box-springs, dressers, night tables, pillows, couches, chairs, and baseboards in **all** rooms (including closets). A space spray will also be used to kill adult insects living in draperies, behind picture frames, wallpaper, etc. An insecticide “dust” will be applied to electrical areas and wall voids.

PREPARATION:

- Mattresses and box springs must be free of all bedding and leaned up against the wall. Remove any plastic coverings and bed bug protective bags.
- Cover fish tanks and turn off air supply.
- Kitchen area must not have any open food or dishes (store in cupboard).
- Remove all items from closets and dressers and remove dresser drawers.
- You may place these items in sealed plastic/garbage bags and leave them in the center of a room.
- Clothing and bedding must be washed (with hot water) and inspected for bed bugs before replacing items into cupboards and drawers. Items may be cleaned either prior or post treatment as long as they remain in sealed bags during the treatment process.
- Remove all electrical light switch covers and open all pipe-run doors.
- Pick up and put away toys used by children and pets. Remove any clutter from the unit.
- All furniture must be a minimum of 2 feet away from walls (you are not expected to move waterbeds, wall units or television/entertainment centers)

When you return home:

- Inspect all articles for insects before returning items to cupboards/closets. (i.e. plastic bags, boxes, clothing, etc.). Do not store items under the bed.
- You should vacuum all baseboards and seams of mattress and box-springs and all furniture prior and post treatment for maximum effectiveness.
- You may choose to steam clean your mattresses and box-springs, couches and other furniture two weeks post treatment or prior to the treatment application (as to not reduce insecticide’s residual effectiveness).

-----**DETACH AND RETURN TO MANAGEMENT OFFICE**-----

PERMISSION TO ENTER

Arrangements have been made to allow access into my suite on the _____ day of _____
20____ in order to carry out bedbug treatment.

I am aware of the above preparations and agree to have Standard Pest Control Inc. apply
insecticide to my suite in order to carry out the bedbug treatment.

ADDRESS: _____

SUITE: _____

PRINT NAME: _____

SIGNATURE: _____