October 2008

Bed Bug Treatment Preparation

The Toronto Bed Bug Project in conjunction with the Structural Pest management Association of Ontario and its members has developed a set of guidelines for the treatment of bed bugs in multi-unit dwellings for Pest Management Professionals (PMP).

Before the treatment begins, all occupants, including pets, must leave the unit and not enter for a minimum of 3 - 4 hours after the technician arrives. Aquariums may remain in place as long as the filtrations and aeration systems are turned off and the tank is adequately covered. Filtration and aeration equipment should be turned back on 6 hours after treatment. Anyone who is pregnant or has allergies or asthma should take the necessary precautions.

Before treatment:

- All clutter should be removed from the unit.
- If possible, steam clean, wet vacuum or shampoo any carpeting and furnishings.
- Vacuum the mattress thoroughly including the crevices, handles and buttons.
- Vacuum bed frame, baseboards and objects/flooring close to bed.
- Discard the vacuum bag (placed in tightly sealed garbage bag before disposal).
- Remove all clothing from dressers and place in clean plastic bags or plastic totes.
- Bookshelves, nightstands or other furniture in the immediate area must be emptied so that the technician can spray the undersides of the furniture.
- Place all items in tightly sealed garbage bags and leave them in the room to be treated.

Laundering

All clothing items should be placed in garbage bags, sealed and emptied directly into the washing machine. When the laundering cycles are complete, the clean laundry should be placed in new clear garbage bags and sealed during the treatment process. The garbage bags used for transporting clothing articles to the laundry room should be discarded outside the premise as they may contain bed bugs. For severe infestations, water soluble bags should be used if possible to collect sheets and clothing and put directly into the wash. It is important to **launder items** using **hot water** as cold water will not kill bed bugs or their eggs. All clean clothes should be put in the dryer on high for a minimum of 20 minutes. Some clothing may require dry cleaning.

Beds

All bedding must be removed before the technician arrives. Soiled bedding should be washed in hot water (separate from all other laundry) or dry cleaned before or soon after the treatment to avoid resurgence of bed bugs. Pillows should also be placed in the dryer on high heat for a minimum of 20 minutes. After treatment, bed skirts should be avoided; bedding tucked in tightly; and bed kept a few inches away from the wall.

Baby cribs

All linen should be laundered. All toys should be washed in soapy hot water and stuffed toys should be placed in dryer on high heat for 20 minutes.

Dressers and night tables

All contents of dressers are to be placed in garbage bags and placed in the dryer cycle on hot for a minimum of 20 minutes. All articles on top of dresser are to be removed and placed in plastic bags or plastic totes. Bookshelves, nightstands or other furniture in the immediate area must be emptied so that the technician can spray the undersides of the furniture. Furniture and items should be moved at least 30 cm (12 inches) away from the walls to facilitate spraying of the baseboards. Shelving and drawers should be clean.

Closets

All closets including linen closets are to be emptied. Clean articles should be placed in the dryer on high heat for a minimum of 20 minutes. All soiled articles need to be washed in hot water and then dried in high heat. Laundromat dryers may have lower heat settings and may not heat up to 60° C so the full cycle should be used.

Sofas and chairs

All chair covers, throws and pillows must be laundered prior to treatment.

Disposal of furniture

Discarding beds, bedding, and furniture is NOT a sound approach to bed bug control as they can be easily re-infested. Furniture that is infested with bed bugs that cannot be salvaged needs to be disposed of in a manner that will prevent the further spread of bed bugs. In the process of removing a piece of furniture, bed bugs can escape into hallways and make their way into new apartments spreading the problem to new areas.

If you decide to throw out bed bug infested furniture:

- Take apart, deface or damage the piece of furniture to ensure it cannot be reused.
- Mattresses should be slashed or otherwise damaged to make it unusable and wrapped.
- Wrap the furniture in plastic so bed bugs cannot escape—this should be done in the unit before the mattress is removed.
- Put in trash shortly before pick-up, so it doesn't sit for a long time.

March 2008

Bed Bugs

What are bed bugs?

Bed bugs are insects that, as adults, have oval-shaped bodies with no wings. Prior to feeding, they are about 1/4 inch long and flat as paper. After feeding, they turn dark red and become bloated. Eggs are whitish, pear-shaped and about the size of a pinhead. Clusters of 10-50 eggs can be found in cracks and crevices. Bed bugs have a one-year life span during which time a female can lay 200-400 eggs depending on food supply and temperature. Eggs hatch in about 10 days.



What do bed bugs feed on?

Bed bugs prefer to feed on human blood, but will also bite mammals and birds. Bed bugs bite at night, and will bite all over a human body, especially around the face, neck, upper torso, arms and hands. Bed bugs can survive up to six months without feeding. Both male and female bed bugs bite.

Can I get sick from bed bugs?

There are no known cases of infectious disease transmitted by bed bug bites. Most people are not aware that they have been bitten but some people are more sensitive to the bite and may have a localized reaction. Scratching the bitten areas can lead to infection.

How do bed bugs get into my home?

Bed bugs are often carried into a home on objects such as furniture and clothing. If you think you have a bed bug problem, check for live bed bugs or shells in the following areas:

- Seams, creases, tufts and folds of mattresses and box springs
- Cracks in the bed frame and head board
- Under chairs, couches, beds, dust covers
- Between the cushions of couches and chairs
- Under area rugs and the edges of carpets
- Between the folds of curtains
- In drawers
- Behind baseboards, and around window and door casings
- Behind electrical plates and under loose wallpaper, paintings and posters
- In cracks in plaster
- In telephones, radios, and clocks

Bed bugs can also travel from apartment to apartment along pipes, electrical wiring and other openings. If the infestation is heavy, a sweet smell may be noticed in the room.

What can I do if I have bed bugs in my home?

The best method to deal with bed bugs is Integrated Pest Management (IPM), which combines a variety of techniques and products that pose the least risk to human health and the environment.

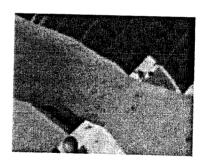
- 1. Consult with your local health department or a professional Pest Control operator to confirm that you have bed bugs.
- 2. Inspect your mattress and bed frame, particularly the folds, crevices and the underside, and other locations where bed bugs like to hide.
- 3. Use a nozzle attachment on the vacuum to capture the bed bugs and their eggs. Vacuum all crevices on your mattress, bed frame, baseboards and any objects close to the bed. It is essential to vacuum daily and empty the vacuum immediately.
- 4. Wash all your linens in the hottest water possible and place them in a hot dryer for 20 minutes. Consider covering your pillows and mattress with a plastic cover.
- 5. Remove all unnecessary clutter.
- 6. Seal cracks and crevices between baseboards, on wood bed frames, floors and walls with caulking. Repair or remove peeling wallpaper, tighten loose light switch covers, and seal any openings where pipes, wires or other utilities come into your home (pay special attention to walls that are shared between apartments).
- 7. Monitor daily by setting out glue boards or sticky tape (carpet tape works well) to catch the bed bugs. Closely examine any items that you are bringing into your home.
- 8. Consult professional pest control services and discuss options that pose the least risk to humans and the environment.

If you choose to treat the infestation with an insecticide, call a Professional Pest Control Service for more information. Use the least toxic product available and follow all manufacturers' instructions.

Whether you choose Integrated Pest Management or insecticides, you may continue to see some living bed bugs for up to ten days. This is normal. If you continue to see a large number of bed bugs after two weeks, contact a professional pest control service.

What do bed bug bites look like?

When bed bugs bite people, they inject their saliva into the biting area, causing the skin to become irritated and inflamed. Individual responses to bed bug bites will vary. The skin lesion from bed bug bites may go unnoticed, or be mistaken for flea or mosquito bites or other skin conditions.



Four types of skin rashes have been described in the literature:

- 1. The most common rash is made up of localized red and itchy flat lesions. The classical bed bug bites could be presented in a linear fashion in a group of three, which is called "breakfast, lunch, and dinner".
- 2. Small raised red swelling lesions are also common.
- 3. In rare cases, people may develop large raised, often itchy, red welts.

4. In people with high sensitivity to bed bug saliva, people may develop a lump filled with blood or fluid.

Bed bug bites most commonly occur on exposed areas of the body, including face, neck, hands, arms, lower legs or all over the body.

How do I treat bed bug bites?

Most bed bug bites go away by themselves and don't need treatment. Keep the skin clean and try not to scratch. If the bites are very itchy, your doctor may prescribe cream or antihistamines to relieve the itchiness. Oral antibiotics may be prescribed for any secondary skin infection from excessive scratching.

How do I prevent bed bugs from entering my home?

- Although even the cleanest homes and hotels can have bed bugs, regular house cleaning, including vacuuming your mattress, can help to prevent an infestation. Clean up clutter to help reduce the number of places bed bugs can hide.
- Be careful when buying used furniture or clothes. Make sure to inspect the used item, and feel free to ask the retailer if the items were checked for bed bugs.
- Use caution when bringing home used furniture or clothes from the curb side. These items may be infested with bed bugs.
- When travelling take the following precautions:
 - o Inspect the room and furniture: inspect all cracks and crevices of the mattress and box spring, and look for blood spots or live insects. Request a different room if you find evidence of beg bugs.
 - o Protect your luggage: keep all belongings in your luggage and wrap your luggage in plastic to help prevent bed bugs from entering your luggage. Keep luggage on the shelf or away from the floor.
 - o Protect the bed: move the bed away from the wall, tuck in all bed sheets and keep blankets from touching the floor.
 - O Upon returning home: keep your luggage in an isolated area of your home, such as the garage. Inspect the luggage. Wash all your clothes in the hottest water possible and put them in a hot dryer for 20 minutes.

For more information:

- Toronto Public Health www.toronto.ca/health or 416-338-7600
- Effective Control of Bed Bugs, Health Canada, Pest Management Regulatory Agency http://www.pmra-arla.gc.ca/english/consum/bed_bugs-e.html#2



February 2008

Attachment 3

Bed Bug Information for Tenants

Consult with Toronto Public Health or a professional pest control operator to confirm that you have a bed bug problem. Once a bed bug infestation had been confirmed, try to work together with your landlord and/or property manager to solve the problem.

The best method to deal with bed bugs is Integrated Pest Management (IPM), which combines a variety of techniques and products that pose the least risk to human health and the environment. After careful assessment, professional pest control services may be called in to apply pesticide spray.

You may be required by the landlord, property manager or the pest control operators to do the following:

- 1. Vacuum with a nozzle attachment to capture the bed bugs and their eggs. Vacuum all crevices on your mattress, bed frame, baseboards and any objects close to the bed. It is essential to vacuum daily and empty the vacuum immediately.
- 2. Wash all your linens in the hottest water possible and place them in a hot dryer for 20 minutes. Consider covering your pillows and mattress with a plastic cover.
- 3. Remove all unnecessary clutter.
- 4. **Prepare** for the pesticide spray by removing everything from dressers, drawers, closets, shelves, cupboards and counter tops. Provide access to all baseboards, keep floor clear, and move all the furniture 2 feet from the wall.
- 5. Prevent future bed bug problems by sealing cracks and crevices between baseboards, on wood bed frames, floors and walls with caulking. Repair or remove peeling wallpaper, tighten loose light switch covers, and seal any openings where pipes, wires or other utilities come into your home (pay special attention to walls that are shared between apartments).
- 6. **Monitor** daily by setting out glue boards or sticky tape (carpet tape works well) to catch the bed bugs.
- 7. **Examine** closely any items that you are bringing into your home. Furniture put out by someone else for garbage pick-up could be infested with bed bugs. Use caution.

It is normal to see some living bed bugs for up to ten days after treating your home through IPM and/or pesticides. If you continue to see a large number of bed bugs after two weeks, contact a professional pest control service.

For more information:

- Toronto Public Health www.toronto.ca/health or 416-338-7600
- Effective Control of Bed Bugs, Health Canada, Pest Management Regulatory Agency http://www.pmra-arla.gc.ca/english/consum/bed_bugs-e.html#2