



DEEBED
BUGS

A HANDBOOK FOR SHELTER OPERATORS

BED BUGS

A Handbook for Shelter Operators

Bed bugs are a pest and are common in transient populations. Bed bugs are found in hotels, motels, apartment buildings, rooming houses, dormitories and shelters.

No spray or chemical can stop bed bugs from entering your shelter. Checking out areas where bed bugs may live can help prevent them from getting a foothold if they arrive at your facility.

An Integrated Pest Management (IPM) plan is needed to prevent and manage bed bug problems.

The goals of IPM are to

- use pesticides only when absolutely necessary
- take measures to prevent, find and track the insect problem early
- teach people how to deal with bed bugs
- always be aware of that bed bugs can become a problem in your shelter

WHAT ARE BED BUGS?

Bed bugs are a pest, about ½ cm long. They are tan-coloured and flat-shaped before feeding, and drop-shaped and reddish-brown after feeding. They do not fly or jump, but travel from person to person by walking. Usually, they travel from place to place in clothing or luggage.

Bed bugs feed only in the dark, usually at night. They feed on humans and do not move more than a few metres from their food source. Bed bugs hide in dark places between feedings, such as in the folds of mattresses, pillows, behind baseboards, in cracks in the floor, behind posters or wallpaper, and in curtains. They only need to feed once every few days for about five minutes, then return to their hiding place. They do not stay on a person between feedings. Bed bugs can live about half a year without feeding.

There are no reported cases of bed bugs passing on disease to humans. After a bed bug bite, a whitish bump may appear and can be itchy. Scratching the bump can cut or tear the skin leaving it open to infection. A bed bug bite is rarely felt and is often painless. In rare cases, a small number of people are allergic to the saliva injected while the insect feeds; this may result in painful swelling.

BED BUGS AT INTAKE

To prevent bed bugs from coming into the shelter, a few steps can be taken.

1. Ask the client if they were staying anywhere that has bed bugs.

If they have, suggest they immediately wash and dry all of their clothing to prevent bed bugs from entering your shelter. If they carry their clothes in a knapsack or similar bag, have them to wash and dry the bag too. Washing, and especially drying, kills bed bugs. If drying is your only choice, tumble the person's clothing for 30 minutes in a dryer at 35 degrees Celsius or hotter. This will generally kill bed bugs. Hotter is better.

2. Ask the client if they have bed bug bites.

If they do, laundering clothes is even more important. The bed bugs will be killed and clean clothes will reduce chances of infection in sores caused by scratching the bites.

3. If laundry isn't an option, try separation.

If you cannot wash and dry the client's clothing on-site or at intake, try to separate their sleeping area from the rest of your shelter clients. If you don't, it is likely that bed bugs will spread and multiply in your shelter. This means that bed bugs can increase across the entire shelter system. If the person is in a separate sleeping area, check their bedding for bed bugs daily. Ask if they have any new bed bug bites. Vacuum the sleeping area often, making sure to use the hose attachment of the vacuum in all the nooks and crannies. The separation area should be carefully sealed to prevent the insects from getting behind baseboards or travelling through wall separations into other areas.

4. If the client refuses to have their clothes and bag laundered, separate and build it into the case plan.

If the client refuses to have their items laundered, have them sleep in a separate area of the shelter, and build laundering into their case plan. It may take some time to get the client's agreement to this goal, but reaching it should not put others in the shelter at risk of being bitten.

5. In extreme cases, consider a referral.

Extreme cases occur when a client has many bites, comes from a location with many bed bugs, refuses to have their belongings laundered, and you currently cannot separate them from other shelter residents. In this case, contact colleagues in other shelters to see if they can provide a bed in a separate area.

THERE ARE BED BUGS IN YOUR SHELTER, NOW WHAT?

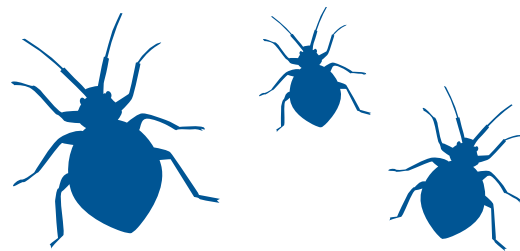
Dos and don'ts when the shelter has bed bugs:

DO

- Using the facts and a reasonable manner, tell clients and staff that bed bugs are in the shelter
- Record the occurrence(s) including who, where, when, how much
- Let your Agency Review Officer know if the problem continues
- Encourage the person who was bitten to continue to stay at your shelter
- Manage the storage of belongings differently and alter the intake process
- Increase laundry access
- Contact your pest control operator to make sure you have an effective IPM strategy in place – NOW – even before it happens!
- Remove clutter from sleeping areas

DON'T

- Panic – bed bugs can be controlled
- Shut down the shelter immediately
- Throw out all the bedding and belongings
- Think the problem will go away on its own
- Delay in starting the actions needed to minimize the presence of bed bugs
- Move the bed to another area



Once bed bugs are found, a quick response is needed prevent bed bugs from getting a foothold in your shelter. Residents, staff or your pest control operator can tell you if there are bed bugs. Controlling bed bugs involves these three groups of people.

When clients tell you that they have been bitten, record and track the information. Note the date, the number of people affected and in which sleeping area and/or part of a sleeping area they were. This is valuable information for your pest control operator and staff.

Staff are critical in looking for bed bugs in the sleeping area. Checking for bed bugs is an important part of having a safe, liveable environment. Schedule bed and bedding checks to ensure detection. Insect glue boards are valuable as an early warning of bed bugs. These can catch bed bugs when they are not easily found.

HOW TO MINIMIZE BED BUGS

There are many ways to minimize bed bug activity in a shelter, but none will prevent bed bugs in the first place. Hostel Services does not recommend one method of minimizing bed bugs over another. A combination of methods can have a real impact.

1. Laundry

Washing and drying clothes can reduce the number of bed bugs in a facility. Drying is most important.

2. Storing belongings

Storing personal property prevents bed bugs from spreading. This is important for those individuals who will not have their belongings laundered. Store belongings in a sealed plastic bag, such as a large-sized garbage bag. This may not kill the bed bugs, but it does prevent them from travelling in the shelter.

Next, choose a storage location away from the sleeping area. Bed bugs cannot survive if they are far away from their food source. Bed bugs cannot live if they are exposed to heat (35 degrees Celsius or hotter). They cannot live if exposed to cold (9 degrees Celsius) for a prolonged period of time, about a day. With the client's permission, place the sealed bag of belongings in a freezer for a day.

3. Check the bed and bedding

Finding bed bugs early helps to reduce their spread in your shelter. Each female bed bug can lay 6–10 eggs at a time and between 200 and 500 eggs in her lifetime. They hatch in about 10 days.

SIGNS OF BED BUGS

- check a sample of bedding in the morning
- look for small blood stains on the bedding
- look for live bed bugs inside pillowcases
- check around the elastic area of a fitted sheet
- check the folds of the mattress and where the bed touches the bed frame

Laundering bedding is a good step to reducing the spread of bed bugs. If the mattress is washable, wash all of it, especially the folds and seam areas. This can reduce bed bugs.

4. Bed position and bed frame

Bed bugs do not fly and it is very difficult for them to walk on polished surfaces. This is why the position of the bed and the treatment of the bed frame are important.

Move the bed 3 to 6 cm away from walls and other fixed furniture to remove one of the ways bed bugs get into the bed. Make sure blankets and sheets are not touching the floor.

MAKING CHANGES TO THE BED FRAME APPLIES TO WOOD BED FRAMES AND CAN BE DONE IN MANY DIFFERENT WAYS

- seal the all wood with a glossy wood sealer
- apply a 3 cm band of petroleum jelly, such as Vaseline, around each leg
- place each leg of the bed in a clean, polished metal can, such as old soup tins, or wrap each leg in metal tape
- wrap double-sided tape around the bed legs, making sure the tape is tight or the bugs will crawl underneath it
- place an insect glue trap under each bed leg

5. Replace the bed frame

Bed bugs have a hard time climbing up metal bed frames, especially if the legs are wiped with a cloth every couple of days to keep them shiny. Replace all existing wood bed frames to metal ones.

6. Seal the mattress

SEALING THE MATTRESS AND BOX SPRING IN A FITTED VINYL COVER, OR COVERING THE WHOLE MATTRESS IN PLASTIC WORKS BECAUSE

- it takes away crevices where bed bugs can hide
- a tightly fitted cover is another shiny surface that bed bugs have difficulty climbing
- the cover traps existing bed bugs, seals them away from their food source and they die

7. Steam

Steam kills bed bugs. Rent or purchase a steamer and apply the steam to all of the mattresses, bed frames, carpets, rugs and curtains in your shelter. Steam is effective to a depth of 3 cm from the surface of the material that is being steamed. The steam must be 70 Celsius or hotter to be effective.

8. Vacuum often

Vacuuming does two things. In shelters where there are no signs of bed bugs, a quick look at the vacuum collection will show if there are bed bugs. In shelters where there are bed bugs, vacuuming can remove them from hidden spaces that are dark in the daytime. The wand attachments helps you vacuum the spaces where mattresses meet the bed frame, along baseboards, behind and in the folds of furniture, in cracks in the floor or wall, along the edges of windows, in the folds of curtains, and in carpets and rugs. Empty your vacuum cleaner immediately and seal the contents in a bag before disposing of it. If it will be disposed of at your site, freeze it for a day first.

9. Small mattress tears

Small mattress tears are a chance for bed bugs to go deeper into the mattress during the day. If you cannot replace a torn mattress immediately or you cannot completely cover it, stitch the torn area or apply a heavy-duty tape, such as duct tape, as a temporary solution.

10. Eliminate other daytime hiding places

When bed bugs are in and along cracks and crevices in baseboards, walls and the floor, it is important to caulk or fill these daytime hiding places. If bed bugs are present, remove all posters, wall art, or other things on the wall that can be hiding places. If bed bugs are behind wallpaper, this is a chance to remove or repair the wallpaper and make sure no other bed bugs hidden. If bed bugs are in curtains, try a different style that does not have as many folds or seams.

11. Inspect donations of furniture and clothing

Before accepting a furniture or clothing donation into the shelter, take a flashlight and look over the piece, paying special attention to the cracks, crevices and seams. Furniture requires very close visual inspection. Vacuum and/or steam upholstered furniture and mattresses before using. Put all donated clothing through the dryer treatment.

12. Never stop monitoring, cleaning and treating

This pest is tough. Never think that the problem is gone. Monitor, clean and treat the problem. This must be part of the every-day, standard operating practice at every facility.

COSTS

Managing the costs of bed bug control requires rethinking the processes and investment in good preventive measures in a pest control program. It is better to use resources for a preventive approach, rather than to spend a lot of money trying to control an infestation. There is no common dollar figure for how much it will cost to control an infestation because of the many variables involved. Prevention is cheaper.

CONCLUSIONS

Bed bugs are an issue beyond the walls of your facility. To decrease transmission from one facility to another or within your facility requires dedication. There are several common sense, cost effective strategies that can be implemented to prevent and minimize bed bugs from taking a foothold in your facility as outlined in this document. Following some or all of these, in the context of an IPM strategy, will help address the issue.

THE ROLE OF PROFESSIONAL PEST CONTROL

“Shelters must have a contract with a licensed pest control operator, and have a scheduled inspection and treatment plan,” Toronto Shelter Standards, 2002.

INTEGRATED PEST MANAGEMENT (IPM)

Integrated Pest Management prevents and controls bed bugs. A good IPM always evaluates all new information and makes treatment changes if the results are not as expected.

The goals of IPM are

- use pesticides only when absolutely necessary and limit their use to the minimum required amount to solve the problem
- limit the success of the insect pest through preventive measures – “an ounce of prevention is worth a pound of cure
- monitor for early detection
- educate staff and clients
- always be on the look out for bed bugs