

and then tumble dry on high for at least 40 minutes. A steam iron may also be used on the seams of mattresses or other items where there is stitching or folds in material. The use of high temperature low vapour steam on other areas of harbourage should also be considered. Remember do not move any infested item into another room. Bed bugs are clumsy and if infested items are taken out of a room, the bugs can fall off and spread the infestation. It is always advisable to treat such items before disposal and these should be wrapped in plastic before removal from the room.

Thorough vacuuming of carpet edges, skirting boards and all cracks and crevices using a vacuum cleaner with a disposable dust bag is important for removing bed bugs and their eggs. Seal the dust bag in plastic and dispose in your council refuse bin.

Disposal of infested objects to landfill is an option, where other methods have not been effective. However it is important to wrap the object first so as not to spread the infestation during transport.

Chemical treatments

A range of low toxicity products such as synthetic pyrethroids and carbamates are available for use indoors to control bed bugs. Pesticides do not kill bed bug eggs, so residual products are more effective than non-residual products, as these will kill immature bed bugs once the eggs have hatched. Always read the product label before purchase to make sure that the product you choose can be used for bed bugs. Note that some products are only available to licensed pest management technicians.

These products can be used to treat cracks and crevices where bed bugs are found and should not be applied to bedding where human contact may occur. They are designed to be applied to surfaces where bed bugs may be harbouring, and should not be used as space sprays. After the initial treatment, a follow up inspection should be carried out to find out if further bed bugs or eggs are present. In most cases, repeat treatments are required to control bed bugs.

Whenever using a pesticide product, ensure you read and follow the label instructions.

Bed bugs can be evasive. Detecting and eradicating them may be difficult without experience with these pests and the use of pesticides. Seeking the services of a licensed pest manager is advisable.

For further information please contact your Local Government Environmental Health Officer or the Environmental Hazards Branch of the Department of Health on 08 9388 4999 or visit www.bedbug.org.au

Thanks to Stephen Doggett, Department of Medical Entomology, Westmead Hospital NSW for permission to reproduce the photo of the common bed bug, *cimex lectularius*.



Department of
Health

Produced by the Environmental Health Hazards Branch
Environmental Health Directorate
Health Protection Group
Department of Health Western Australia. May 2006
© Department of Health 2006

HP 3488 JUNE'06 21370

Bed bugs and their control



Delivering a **Healthy WA**

This brochure provides information about bed bugs, advice on how to reduce the risk of bed bugs infesting your premises and what to do if you suspect you have a bed bug infestation.

What are bed bugs?

Bed bugs are small insects which feed on human blood by piercing the skin. They seek out blood meals from humans, usually at night and are attracted to our body heat and the carbon dioxide we exhale. They do not live on humans and they do not burrow into the skin.

Adult bed bugs are 4-6mm in length, oval in shape and a dark reddish brown in colour. Juveniles are 1-5mm in length, depending on the growth stage and are cream, becoming red to blackish after a blood meal. Adult females can lay up to 3 eggs per day, which hatch up to 10 days later.

Bed bugs are very mobile, but only move short distances to feed (up to 3 metres) so are usually found close to a food source. Bed bugs are most commonly found on mattresses, particularly along the stitched edges where there are folds, which provide protection. They can also be found in bed frames, behind bed heads, in bed side furniture and floor joints, carpet edges, air conditioning ducts, light fittings, picture frames, behind wall paper and other cracks and crevices in a room that provide them with security.

Bed bugs can walk to adjoining rooms and units but over greater distances they are carried in and on people's luggage and belongings. This is how bed bugs are moved from infested premises to new premises around Australia and internationally. There is evidence of a resurgence of bed bugs around the world in the commercial accommodation industry and in private homes, so look out for signs of bed bugs when travelling or if travellers visit your premises.

What can I do to reduce the risk of bed bugs infesting my premises?

Evidence shows that bed bugs are more commonly found in low cost short stay accommodation. However they can be found anywhere that people sleep including charter boats and trains. If you are travelling, you may want to consider spraying the exterior of your luggage with an aerosol insecticide, as this may kill bed bugs that have crawled onto your luggage during transit. Wherever possible, thoroughly inspect your luggage on arrival at your destination and look out for signs of bed bugs (see below) wherever you stay.

Ask guests who may be lodging or staying at your home whether they have experienced unexplained insect bites. If they have, help them to inspect their belongings carefully for evidence of bed bugs and treat promptly if anything is found.

Check second hand furniture carefully, particularly bedroom furniture for evidence of bed bugs and have it treated by a professional pest manager if bed bugs are found. This should be done before moving it into your premises. Think carefully about picking up furniture from verge collections as it could be infested with bed bugs. The regular use of a vacuum cleaner with a disposable bag may help to remove adults, nymphs and cast skins. Eggs are more difficult to remove.

Do I have a bed bug infestation?

Signs that you may have a bed bug infestation include live bed bugs, cast skins, eggs, or dark spots of bed bug excrement or blood on bed sheets, mattresses, skirting boards or in cracks and crevices. Bed bug eggs are about 1mm in length, cream coloured and are laid in well hidden areas.

You may also notice bite marks on your skin, although one in five people bitten may not experience a reaction and the bite may not be noticed for up to nine days. Skin reactions include redness, swelling, itching and burning sensations. Humans tend to be bitten most often on the shoulders and arms, in distinctive lines. These bites and skin reactions are generally not considered a health risk. If you have experienced a reaction to the bite, avoid scratching as this may lead to it becoming infected. Seek medical advice if necessary.

How can I eradicate bed bugs?

If you think that you have a bed bug infestation, contact a licensed pest manager for treatment. Delay or failure to treat promptly and effectively may cause the infestation to spread, making control more difficult and expensive.

Prior to contacting a licensed pest manager, you may seek further information at www.bedbug.org.au. It will be necessary for the pest manager to thoroughly inspect the premises to identify all harbourages. After the initial treatment, follow up inspections are required, usually with repeated treatments to completely eradicate this pest.

Bed bug control is most effective when both chemical and non-chemical treatments are combined. It is advisable to discuss bed bug treatment options with your pest manager.

Non-chemical treatments

There are non-chemical treatments that are safe and effective in reducing bed bug numbers prior to insecticide treatment.

Regular inspections of mattresses and other harbourage areas are essential. If bed linen is infested, wash the affected articles in hot water