

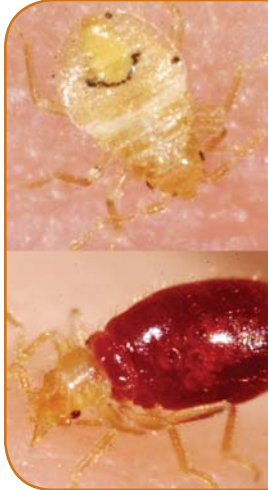


Bed Bugs

Pest Note



Photos courtesy of:
Gary Alpert; Whitney Cranshaw, Colorado State University, Bugwood.org



Bed bug nymph
before and after feeding
Photo: Lou Sorkin



Bed bug bite region
Photo: Lou Sorkin

Bed bugs—what are they?

Bed bugs have an oval broad, flat body and a short, broad head. Shaped similar to an apple seed, unfed adults are around 6 to 10 mm long and brown and wingless. After feeding, they swell slightly in size and darken to a blood-red colour. The nymphs are shaped like the adults, but are yellow-white in colour.

Itchy welts on skin and/or black or brown spots on mattresses sheets, bed frames or walls often indicate that there is a bed bug infestation.

Bed bugs are also known by several names: wall louse, house bug, mahogany flat, red coat, crimson rambler as well as others.

The bed bug eggs are white, about 1 mm long (1/25 inch), and are almost impossible to see on most surfaces. The female bed bug lays at least 200 eggs in her lifetime, at a rate of about two or four per day. The eggs have a sticky coating and are deposited in cracks and crevices, behind woodwork and similar hidden locations. They usually hatch in six to 17 days.

Newly hatched nymphs feed as soon as food is available. A bed bug goes through five moults before it reaches full maturity. Adults usually live for around 10 months, but can live for a year or more in a home where the environment is good for reproduction, with temperatures ranging between 21°C and 28°C, making it ideal for breeding year round.

Bed bugs can live from several weeks up to roughly a year and a half without feeding. Older bed bugs can go even longer without feeding.

What can they do?

Bed bugs can cause allergic reactions and itchy welts. Allergic sensitivity can increase if exposure is prolonged. They do not however pose a major health risk and are not known carriers of blood-borne diseases. Bed bug bites may not be noticed immediately because bed bugs typically feed at night when people are asleep.

Bed bugs are wingless and cannot fly or jump, but are able to hide in extremely small locations because of their flattened bodies—under wallpaper, behind picture frames, in electrical outlets, inside box springs, in mattress pads and in night tables. Long considered eradicated in most metropolitan areas, bed bugs are making a comeback. People now travel more than ever before, and bed bugs are hitching rides on clothing and luggage. They can now be found everywhere there is a high turnover of people, from homeless shelters to five-star hotels. They can also be accidentally transported around the house on objects. Bed bugs do not indicate a lack of cleanliness.

How can I manage them?

Because bed bugs are hard to get rid of, a pest control operator is a simple solution. Alternatively, you may decide to control them yourself. Usually more than one chemical treatment is required, and must be done in addition to physical control.

Be thorough in addressing bed bug infestations, because bed bugs travel easily, you may have to treat nearby rooms. Remove or reduce any clutter that might transport bed bugs.

Responsible Pesticide Use

Before Purchasing a Pesticide

- Identify the pest correctly.
- Use physical control methods and alternatives to pesticides.
- Read the label directions and safety precautions before buying the product. The label must include the name of the pest to be controlled and the treatment location (e.g. indoor, outdoor, garden uses, pet treatment).
- Purchase only the quantity of product needed for the treatment.
- Consider hiring a licensed pest control operator.

Using a Pesticide

- Carefully read all label instructions and precautions before using pesticides.
- Do not drink, eat or smoke while applying pesticides.
- Persons and pets should vacate the area during treatment. Cover or remove aquaria.
- If kitchen area is to be treated, cover or remove food, dishes and utensils.

After Using a Pesticide

- Always wash your hands thoroughly after handling any pesticide product.
- Do not permit persons or pets to contact treated surfaces until residue has dried completely.
- Provide adequate ventilation of treated areas after use.





Adults, nymphs, eggs, feces, and shed skins on cardboard
Photo: Lou Sorkin



Bed bugs hiding behind flat rubber moulding
Photo: Lou Sorkin

Bed treatment

Infested mattresses should be steam-cleaned. Take care to use steam that is hot enough, and avoid excess moisture which could lead to mould. Inspect your bed thoroughly by examining the seams, tufts and crevices of the mattress as well as the box spring, bed frame and headboard. You may have to remove the cloth underside of the box spring to determine if there are bugs inside. Mattress pads and sheets should be washed in hot water and dried on the high setting. Infested areas should be vacuumed carefully with a brush attachment. Afterwards, dispose of the vacuum bag immediately and inspect the brush attachment for bed bugs. Bed bugs cannot easily climb metal or polished surfaces and cannot fly or jump. Treat the legs of beds to keep them away. Coat the legs with double-sided carpet tape or petroleum jelly, you can also place the legs of the bed inside glass jars or metal cans.

You may have to discard your bed. Holes or worn spots in the fabric may allow bed bugs to lay eggs in areas not easily reached, and there are restrictions on how insecticides can be used on beds.

Treatment of other items

Carefully examine all night tables, baseboards, dressers, headboards (especially padded ones), electrical outlets, any items stored near or under the bed, any nearby carpeting or rugs, picture frames, switch plates, inside clocks, phones, televisions and smoke detectors—in short, anything and everything that is in the room where the infestation has been noted. Upholstered chairs and sofas can also harbour bed bugs and should be treated with careful vacuuming and laundering of all possible parts (cushions, slipcovers, skirts, etc.).

Smaller items that cannot be laundered can sometimes be treated by heating (temperatures greater than 50°C) or freezing. Some items can be wrapped in plastic wrap and placed outdoors on a hot sunny day or in sub-zero temperatures in the winter. However, the freezing temperatures must be maintained for a prolonged period of time (e.g. four days of cold exposure at 0°C) to ensure that the bed bugs are killed.

Prevention

To prevent future bed bug infestations, mattresses must be completely enclosed. They can be wrapped in zippered bed encasements available from allergy supply companies, with duct tape over the zipper. Mattresses can also be wrapped and sealed in plastic film. Be cautious about taking in second-hand furniture, bedding, mattresses or beds. Inspect and clean them before bringing them home. When you travel, inspect the mattress and headboard in the hotel room, do not bring your pillow from home, and do not put your suitcase on the bed.

Products

Domestic class products available to homeowners will generally contain the active ingredients pyrethrin or diatomaceous earth.

Several commercial class products are available to professional pest control operators. These may include low-odour sprays, dusts or aerosols; your pest control operator will select the best product for your particular situation.

Note: Bed bug infestations can be extremely difficult to treat, and repeat applications may be required. Always follow the pesticide label directions to minimize exposure and maximize efficacy of the product. Between applications of pesticide products, keep monitoring the situation to physically control ongoing and prevent future infestations.

© Her Majesty the Queen in Right of Canada, represented by the Minister of Health Canada, 2009
HC Pub: 8195
ISBN: 978-1-100-12303-5 (978-1-100-12304-2)
Catalogue Number: H113-1/35-2009E (H113-1/35-2009E-PDF)

Health Canada Pest Management Regulatory Agency

2720 Riverside Drive, Ottawa ON K1A 0K9
Phone from inside Canada: 1-800-267-6315
Phone from outside Canada: 613-736-3799 (long distance charges apply)
Fax: 613-736-3798
www.healthcanada.gc.ca/pmra



- Wipe clean all surfaces that come in direct contact with food, such as counters, tables and stovetops, including indoor and outdoor surfaces.
- Always store pesticides out of reach of children and pets and away from food and beverages.

Accidental Poisoning

- Call a poison control centre immediately and seek medical attention.
- Take the pesticide container or label with you to the emergency facility or physician.
- Follow first aid statements on the label.
- In case of accidental poisoning of pets seek veterinary attention immediately.
- Report pesticide incidents to manufacturers (phone number on label). They are required to send them to Health Canada.

Disposing of Pesticides

- Do not reuse empty pesticide containers. Wrap and dispose of in household garbage.
- Follow the product label instructions or contact provincial authorities for disposal of pesticides.

Note: These are general recommendations. Consult the label for specific instructions. When in doubt, contact a professional.

Health Canada
Pest Management Regulatory Agency
www.healthcanada.gc.ca/pmra
1-800-267-6315