

## Bedbugs

Bedbugs are small, wingless insects found all over the world. They are nocturnal parasites, which means they rest during the day and are active at night. They feed on the blood of humans. Bedbugs prefer to hide in bedding and on mattresses where they have ready access to a source of food.

Bedbugs have highly developed mouth parts that can pierce skin. Their bite is painless but becomes itchy and swells into a reddened wheal. Unlike the random pattern of bites made by mosquitoes, bedbugs tend to leave orderly rows.

Although bedbugs can harbour diseases in their bodies, transmission to humans is considered highly unlikely. For this reason they are not considered dangerous, unless a person is allergic to them. However, their presence can be distressing and their bites can be highly irritating.

### Characteristics of the bedbug

The characteristics of a bedbug include:

- Wingless
- Half a centimetre long
- Flat, oval-shaped body
- Six legs
- Light brown in colour, changing to rust-red after a meal of blood
- Squat head
- Large antennae
- Large mouth parts (mandibles)
- Complex life-cycle involving many stages of development
- Ability to survive without feeding for months at a time
- Susceptible to extremes of temperature.

### Humans are the preferred host

Bedbugs live exclusively on blood. They prefer human blood but will feed on other mammals if necessary.

Bedbugs are attracted to body heat and the carbon dioxide in expired air, which is how they find their host. Bedbugs commonly target the shoulders and arms.

During feeding, the bedbug's proboscis (feeding organ) swings forward and downward to pierce the skin of the victim. Saliva (containing an anticoagulant) is then injected, which is the cause of an allergic reaction in some people. Bedbugs take around five to 10 minutes to feed. As the bedbug engorges with blood, its colouring changes from light brown to rust-red.

### Common hiding spots

The living areas favoured by bedbugs include:

- Mattresses, particularly along the seams
- Bedding such as sheets and blankets
- Beneath loosened edges of wallpaper
- Between the cracks of wooden floors
- In wall cracks or crevices
- Carpet
- Furniture, particularly in seams and cracks.

### Causes of infestation

Bedbugs often hide in luggage, clothing, bedding and furniture. They are most often found in dwellings with a high rate of occupant turnover such as hotels, motels, hostels, shelters and apartment complexes.

Any household can be invaded by bedbugs, but a high standard of hygiene can discourage bedbugs from spreading widely throughout a home.

### **Recognising an infestation**

The first indication of a bedbug infestation may be the presence of bites on family members. A thorough inspection of your premises, especially the common hiding spots, may also reveal:

- The bedbugs themselves – however, due to their size, they are often hard to see
- Small bloodstains from crushed bugs on sheets or mattresses
- Rusty or dark spots of bug excrement on mattresses, bedding and walls
- An offensive, sweet, musty odour from their scent glands, which may be detected when infestations are severe.

### **Symptoms of a bedbug bite**

The bite of a bedbug has certain features, including:

- Large wheals which reduce to a red mark then gradually fade over a few days
- Made in orderly rows
- Itchiness
- Reddening of the skin
- Localised swelling
- Formation of blisters
- Small loss of skin tissue in some cases.

### **Treating bites**

Bedbugs are not known to transmit any blood-borne diseases. However, the bites can be itchy and distressing.

Suggestions to treat bedbug bites include:

- Resist the urge to scratch.
- Use calamine lotion or anaesthetic creams to treat the itching.
- Wash the bites with antiseptic soap to reduce the risk of infection.
- Apply an icepack frequently to help relieve swelling.
- Take pain-killing medication if symptoms are severe.

See your doctor if the bite develops an infection.

### **Avoiding an infestation**

In general, bedbugs enter your home in luggage or on secondhand items such as bedding and furniture. Taking care with these items, in addition to high standards of hygiene and housekeeping, should help to minimise the chance of an infestation in your home.

### **Controlling a bedbug infestation**

High standards of hygiene and housekeeping alone are unlikely to control an infestation. However, keeping a house clean will reveal the presence of bedbugs at an early stage, making control easier and reducing the chance of widespread infestation.

Some general suggestions to eliminate bedbugs include:

- Thoroughly wash, vacuum or clean all surfaces and bedding.
- Wash bedding and affected clothing where possible, using hot water. Dry in a clothes drier on a hot setting.
- Vacuum mattresses, seal in dark plastic and leave outside in the hot sun for as long as possible.
- Steam clean carpets.
- Spray common hiding spots with a surface insecticide registered to control bedbugs. Follow the label directions carefully. Do not treat bedding with insecticide.

Your local council can offer information and advice on dealing with a bedbug infestation.

### **Hiring a professional pest control operator**

A qualified pest control operator can determine the extent of the infestation, then use registered insecticides to kill the bedbugs. Repeat visits may be necessary to ensure all bedbugs at various stages of the lifecycle have been eradicated. Good hygiene practices, such as frequent house cleaning, should help to prevent any further infestations. However, vacuuming immediately after treatment should be avoided to ensure that the residual insecticide is not removed. For further information, consult your pest control operator.

### **Where to get help**

- Your doctor
- Licensed pest control operators
- Your local council

### **Things to remember**

- Bedbugs are commonly found on beds or mattresses, and feed on human blood.
- Their bite typically causes a large, reddened and itchy wheal that fades to a red spot.
- Bedbugs are not believed to transmit diseases to humans.

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DHS - Environmental Health Unit

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