

BEDBUGS – (*Cimex lectularius*)



Bedbugs live off their host, Man, in crevices in walls, under wallpaper, in light switches, behind headboards, beneath folds of a mattress and only visit the host to take a blood meal. Eggs are laid in these harbourages, covered with a quick drying adhesive which cements them to the surface on which they are laid. Empty shells remain in position after hatching.

Eggs Shaped like a rubber teat, one end covered with an egg-cap. The eyes of the young insect are visible as two pink spots through the shell at a certain time during incubation. The hatching insect breaks off the egg-cap – the empty egg is translucent.

Nymph During the day, like the adults, they remain in cracks and crevices hidden away – this is greatly facilitated by their very flattened shape. There are five nymph stages. Nymph bedbugs display the colour of their partially digested blood meals, whereas the adult cuticle being harder and darker brown in colour does not show it, except as an extended abdomen. It is at night that both adult and nymphs feed. All stages are pale in colour immediately after moulting, but darken in a few hours. Each nymph stage requires a blood meal before it proceeds to the next moult.

Adults The adult has well developed antennae on its head and a pair of inefficient eyes. It has biting and sucking mouthparts in order to feed on the blood of its host. It normally feeds on upper, exposed parts of the body. Most bedbugs are found on a wall close to the sleeping host, or in the bed frame, but they can be quite a distance away, sensing the warmth of the hosts body. Blood is pumped up into the bugs gut and saliva enters the

wound. It takes about 5-10 minutes to suck a full meal from the exposed flesh of its sleeping host and behind it are left brown faecal deposits on pillows, sheets and walls near its harbourage. The nymph and adult are quite good climbers, except of very smooth, clean surfaces, preferring a slight film of dust to give them a foothold.

The bedbugs usually only emerge from their harbourages at night and avoid light. They are most active just before dawn. When bedbugs are disturbed they emit a characteristic almond-like odour. Bedbugs can withstand starvation, the adult more than the nymph stages. Prolonged cold temperatures, for example a cold winter in England, result in a mortality of eggs and young stages. Very high temperatures – above 34°C – are also injurious. The life cycle takes about 125 days at normal temperatures.

Bedbug Infestation

This is most commonly found in bedrooms and spread to other rooms or dwellings by the transference of bedding and furniture, but not clothing or bodies as they do not spend a long time on the host. Suitcases can become infested, and where hotels, hostels and lodging houses have transient occupants then there may be increased likelihood of infestation, especially with visitors from warm countries where bugs are more prevalent. Timber and furniture taken from infested homes which are being demolished can also cause cross-infestation.

In centrally-heated premises bedbugs will breed all year, but usually they die out at the onset of winter in Britain, leaving a few to continue the life cycle of multiplication during summer months.

Detection and Control of Infestation

To ascertain the extent and location of an infestation, inspection of likely harbourages is necessary. Spots of excrement, clusters of tiny eggs, and live insects flushed out with a pyrethroid aerosol, characteristic almond-like smell, cast nymph skins and marks on bedding all indicate infestation in addition to bites suffered by people.

Bedbug infestations are easier to eradicate at an early stage. Small infestations in second-hand furniture for example can be treated by spraying with a residual insecticide.

Large infestations in bedrooms will need special attention to the bedding, bed frame and surrounding gaps in walls and floors. Undersides of windowsills, door-casings, pictures and wallpapers may also need treating as well. The type of insecticide used will depend on the surface in question to prevent staining. Soft furnishings should be washed or dry cleaned, mattresses can be lightly sprayed and all potential harbourages treated to the point of run off .

If a bedroom or dormitory has to be used the same day, then treat in the morning to allow mattresses, furnishings etc time to dry properly.