

# Bed Bugs

## Advice leaflet about Bed Bugs

There are two types of bed bug, *Climex lectulaius* the common bed bug found in temperate regions, and *Climex hemipterus* found in the tropics and subtropics.

As bed bugs cannot fly, they must either crawl or be passively transported in clothing, or more probably in luggage, furniture, books and objects used as harbourages. Their ability to withstand many months without feeding increases their chances of surviving such transportation and the insects' very wide distribution throughout the world demonstrates their success.

### Appearance

Common bed bugs are approximately 5-8mm long and wingless with a chestnut brown body. In unfed specimens the abdomen is circular and paper-thin becoming purple and swollen after feeding. They have a short, broad head with a pair of prominent antennae and a pair of small dark compound eyes. They have three pairs of well-developed legs with clawed feet that allow them to climb rough surfaces and to crawl rapidly.

### Life Cycle

Bed bug eggs, which are slightly curved, measuring 0.8-1.3mm long by 0.4-0.6mm broad are cemented to the surfaces of the harbourages, often in large numbers. Unhatched eggs are an opaque, pearly white colour, whilst hatched eggs which remain in position long after hatching, are opalescent and translucent. While temperature and the availability of food have a profound effect on egg production, under optimal conditions egg laying is almost continuous, at a rate of about three per day. The number of eggs laid by a female in the course of her adult life has been variously quoted as between 150 and 345.

The speed of development from egg to adult and the duration of adult life vary according to temperature and availability of food. With frequent feeding, at normal room temperatures (18-20°C) adults live for 9-18 months, with egg incubation taking 10-20 days and the complete cycle 9-18 weeks. Under these conditions nymphs (young) feed at about 10-day intervals and the adults weekly. If necessary, both can survive long periods without food. Under cool conditions (13°C) starved adults could survive for as long as one year.

### Distribution

Any household can be invaded by bed bugs, but it is likely that infestations will only become established in premises with low standards of hygiene. Bed bugs are therefore generally associated with poor, crowded and unhygienic conditions. Most bed bug infestations are to be found in domestic premises, usually in the bedrooms. Both juveniles and adults live similar lives, hiding away in cracks and crevices for most of the time and coming out at night, usually just before dawn, to feed on the blood of their sleeping hosts. Their hiding places will be close to where their hosts sleep: in the bed frame or mattress, in furniture, behind the skirting, behind the wallpaper – anywhere that affords a dark harbourage during the daylight hours for these nocturnal creatures.

In temperate climates bed bugs reach their peak numbers towards early autumn. At this time all stages in the lifecycle will be present. With the onset of colder weather their activity decreases, egg laying ceases and development of the juvenile forms slows down.

## Significance

Bed bugs are not regarded as disease carriers, but their blood feeding can cause severe irritation in some people, resulting in loss of sleep, lack of energy and listlessness particularly in children. Iron deficiency in infants has resulted from excessive feeding by bed bugs. The bite, which leaves a dark red spot, surrounded by a reddened area. Different individuals react differently to bites, some gaining immunity.

Probably more important however, is the distaste with which these insects are regarded. Bed bug excrement gives a characteristic speckled appearance to their harbourages, whilst their 'stink glands' confer a distinctive and unpleasant almond-like smell on infested rooms. In addition, the very thought of being preyed upon by such creatures is quite sufficient to make most people take immediate action to control them.

## Control

In all infestations, particularly those newly established in well-kept houses, an attempt should be made to determine the source of infestation, so that proper measures can be taken.

A thorough inspection of infested premises should seek to uncover the extent of the infestation, since the measures necessary for control will depend on whether the infestation is established and distributed throughout the premises, or recently introduced and likely to be more localised.

Control measures used must be thorough and be directed at all the harbourages. In circumstances where the infestation has originated from birds' nests, it will be necessary to treat the nests and advisable to bird proof the building.

High standards of hygiene and housekeeping are unlikely to provide an adequate method of control but will reveal the presence of bed bugs at an early stage, making control easier. Bed bugs can only proliferate if they are tolerated. If they are suspected, a close inspection of the bed, the mattress around the seams, the back of the headboard etc, should reveal their presence. The use of a residual insecticides sprayed lightly around the areas may help, as the insects will be driven out of their hiding places. The finding of eggs or egg cases and the blackish spots of bug excrement will also indicate their presence. Infested bedding (e.g., sheets) and clothing should be laundered or burnt and the fabric of infested rooms should be thoroughly cleaned. Particular attention should be paid to removing dust, fluff and debris from insect harbourages e.g. cracks, crevices, seams of fabrics, buttons on mattresses etc.

To eradicate the infestation it will be necessary to treat the premises thoroughly with suitable insecticides, including the beds, other furniture and harbourages in the fabric of infested rooms.

## Local Authority Service

If you do not wish to try to deal with an infestation yourself, the Environmental Health Department does offer a service, although there is a charge for this. If you would like a Pest Control Officer to visit to treat the infestation, please telephone the department on **01799 510370** to make an appointment. A fixed standard charge is made to cover this service. Also should the initial treatment be unsuccessful within two weeks one further treatment will be carried out to at no extra cost.

**We accept the following credit/debit cards: VISA, VISA DELTA, MASTERCARD, SWITCH. Please have your details ready when requesting an appointment.**

All products used by the Council are approved for use on domestic and commercial premises under the Control of Pesticides Regulations 1986.

Alternatively, there are a number of private pest control companies that will also do this work, and you can find more details from the local telephone directory.

