



**OPTIMA**  
PEST MANAGEMENT SERVICES

## PEST FACT SHEET

Bed Bugs  
*Cimex lectularius*

### Size

Adults measure 3/16 inch long.

### Characteristics

Oval and flat. Bed bugs are amber to reddish brown in color, depending on how recently they fed. When present in sufficient numbers, it is possible to detect an obnoxiously sweet or foul "locker room" odor, which is emitted from their glands.



### Habitat

This insect probably received its common name of bed bug from its close association with human sleeping beds where it often seeks refuge during daylight, only to come out to feed on the bed's occupant(s) at night. The bed bug is an ectoparasite of primarily humans but will also attack poultry, caged and invasive birds and various mammals, including rodents.

### Biology

Female bed bugs lay 1 to 5 eggs per day with the 1/32 inch long, white eggs being deposited individually in cracks or on rough surfaces and secured with a transparent cement for an average total of 200 eggs; maximum eggs per day is 12, with 541 for a lifetime. There are 5 nymphal instars with a blood meal required for each molt. About 3 to 10 minutes are required for each blood meal, during which saliva containing an anticoagulant is injected. Developmental time (egg to adult) takes 21 days at 86°F to 120 days at 65°F. The threshold for egg hatching, nymphal development, and adult activity is 55 to 59°F. Below 61°F adults enter semi-hibernation and the heat stress death point is 111 to 113°F.

Without a blood meal, once-fed nymphs can survive an average of 51 days (range 28 to 73) at 81°F and 70 to 75% RH. Being poorly fed can greatly prolong the life cycle (up to several years in some studies). With normal feeding and reproductive cycles, individuals can live up to 316 days. Not all bed bugs in a residence will feed concurrently. They remain concealed until hungry. Humans are the preferred host of these insects but in their absence bed bugs will feed on poultry, canaries, English sparrows, mice, rats, rabbits, guinea pigs, and bats.

Although the bite of bed bugs is painless, most people (80%) develop an allergic reaction to the saliva injected by the bug as it feeds. A swelling usually results from feeding but there is no red spot such as is characteristic with flea bites. Swelling may be severe and extend beyond the immediate bite area in highly sensitive individuals. Although bed bugs have been suspect in the transmission of many diseases or disease organisms in humans, in most cases conclusive evidence is lacking.

### Prevention and Management

In hotels and motels, the number one place for infestations is the backside of headboards mounted on walls. These must be removed for inspection. Typically, initial infestations of bed bugs are found associated with the bed such as around mattress buttons and beading, in box springs or their coverings, and in any crevice of a wooden bed frame, such as where members join. They are particularly fond of wood and fabrics as opposed to plastic and metal.

Spraying pesticide emulsion at cracks & crevices, sun drying / boiling of garments