

Bed Bugs and Their Control

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The common bed bug (*Cimex lectularius* Linnaeus) probably received its name from its close association with human bedding. Bed bugs often seek refuge in bedding during the day and feed on the bed's occupants at night. These insects are known by several names: wall louse, house bug, mahogany flat, red coat, and crimson ramblers, to name a few.

While bed bugs feed primarily on humans, they also feed on other mammals, poultry, and other birds. Their host range is confused by the fact that the insect family Cimicidae, of which the common bed bug is a member, has several closely related species with similar habits and appearance. Among those reported in New Mexico are the western bat bug (*Cimex pilosellus* Horvath) and the swallow bug (*Oeciacus vicarius* Horvath). While these insects prefer other hosts, they can, when stressed, feed on humans.

It has never been proven that bed bugs are disease carriers in the United States. They are spread mainly by clothing and baggage of travelers and visitors, secondhand beds, bedding materials, furniture, and laundry.

The mature bed bug is a brown- to mahogany-colored, wingless insect. Its size depends on how recently it has eaten a blood meal. An unfed bed bug is between 1/4 and 3/8 inches long. The upper surface of its body has a papery, crinkly, flimsy appearance. When engorged with blood, its body becomes elongated and swollen, and its color changes from brown to dull red. The color, size, and shape change from an unfed to a full bug is remarkable.

Bed bug eggs are white and about 1/3-inch long. Under favorable conditions the female bed bug lays about 200 eggs at the rate of 3 or 4 per day. Eggs have a sticky coating and stick to objects where they are laid. It usually takes the eggs 6 to 17 days to hatch, and the newly emerged nymphs will feed immediately. A bed bug goes through five molts (shedding of its skin) before it reaches maturity. Depending on environmental factors and the availability of food, there can be considerable variation in developmental rate. Bed bugs may live for several weeks to several months without feeding, depending on temperature.

A bed bug generally feeds at night, but if it is hungry and the area has a dim light, it may feed during the day. A bed bug generally pierces the skin of humans as they sleep. It injects a fluid into the human skin to aid in obtaining blood. Often this fluid causes a welt on the skin that becomes irritated, inflamed, and itchy. If left undisturbed, a full-grown bed bug becomes engorged with blood in 3 to 5 minutes. It then crawls into hiding, remaining there for several days to digest its meal. When hunger returns, the bug emerges from hiding and seeks another blood meal.

Heavily used hiding places are evident by black or brown spots of dried blood excrement on the surfaces where the bugs rest. Eggs, egg shells, and cast skins may be found near these places. Usually there is an offensive odor where bed bugs are numerous. In early infestations the bed bugs are found only about the tufts, seams, and folds of mattresses and daybed covers; later they spread to cracks and crevices in the bedsteads. If allowed to multiply, they establish themselves behind baseboards, window and door casings, pictures, and moldings, and in furniture, loosened wallpaper, and cracks in plaster and partitions.

For heavily infested homes or apartments, a commercial pest control operator should be consulted to control the infestation.

