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Bedbugs  
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**BEDBUGS**

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Infestations of bedbugs are usually confined to sleeping quarters, but the insects may distribute themselves throughout the building. All types of buildings are infested, particularly quarters where the inhabitants are transients, such as boarding houses, barracks, dormitories, cars, or ships. There are several species of bedbugs recorded from different parts of the world as feeding on man, but in the United States the infestations are confined to one species, *Cimex lectularius*.

**HABITS**

Bedbugs feed at night and hide by day. Often their hiding places are remote from the common feeding ground. In cities when infested houses are vacated, it is not unusual for bedbugs to migrate from one house to another, but in districts where houses are widely separated bedbugs are capable of maintaining themselves on rodents and other warm-blooded animals. They are cannibalistic in the absence of warm-blooded animals and are also capable of surviving for long periods without food. Their presence about beds is indicated by small black spots on the sheets, pillow slips, or mattresses, as well as by their characteristic odor.

**LIFE HISTORY**

There are several generations each year. The minimum period required to complete a generation is about 45 days. During cold weather, the length of time required to complete a generation is considerably longer. Each female lays 200-500 eggs, which are laid a few at a time. The small, white, elongated eggs are laid singly in cracks and crevices about the bed, behind picture moldings, or under loose wallpaper. The eggs hatch in 7-10 days into pale, transparent young which resemble their parents except for size and color. They molt or shed their skins at least five times during development and, from necessity, feed on blood from warm-blooded animals at least once during periods between molts. The adults are mahogany brown, usually about a quarter of an inch in length. They are wingless and the mouth-

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parts are for piercing and sucking. Their bodies are flat and broad. The eggs are always more abundant in the spring and early summer.

### INFESTATIONS

Because bedbugs are universally distributed, a source of infestation is always at hand. There is always a possibility that they may be carried in infested merchandise, furniture, or other house furnishings. Reputable dealers, realizing this possibility, now take precautions to prevent or to eradicate bedbugs. Traveling bags infested enroute or laundry done in private houses may serve as a source of infestation. Bedbugs may migrate from one apartment to another or from one building to another, provided the buildings are not too far apart, or the insects may sometimes be carried on clothing into houses. The control of bedbugs has been simplified where brass beds or iron bedsteads have supplanted wooden bedsteads, where tints or paints have taken the place of wallpaper, and where hardwood floors and rugs have replaced the old-fashioned floors and carpets.

### IMPORTANCE

Bedbugs attack their victims at night, disturbing their rest and, in many instances, poisoning the system to such an extent that each feeding puncture swells into a large welt.

### CONTROL

**Kerosene-pyrethrum**—It is possible to control a light infestation of bedbugs with kerosene impregnated with pyrethrum. Use one-half pound pyrethrum "flora grade" to each gallon of kerosene, stir the pyrethrum into the kerosene and allow the mixture to stand for 24 hours, then pour off the clear liquid to be used as an insecticide. Inject a liberal quantity of the liquid back of the woodwork and into crevices of furniture. Thoroughly brush the tufts of mattresses as well as the seams and folds, and treat with some preparation that will not injure the covering. Usually, one of the commercial extracts of pyrethrum is recommended for this purpose.

Sulphur fumigation will control bedbugs where the infested rooms or buildings can be made tight. It is necessary to repeat the fumigation in a week or 10 days because the fumes do not always penetrate all crevices where the eggs are hidden. There are conditions under which fumigation is not advisable and, before deciding to use either treatment, the arguments for and against fumigation should be carefully weighed.

Bedbugs, along with other household pests, succumb to super-heating when it is possible to raise the temperature of a room or building to 120°-130° F., still heat, and maintain this temperature for at least 10 or 12 hours after the heat has penetrated bedding or the bedbug retreats. When the treatment is made in warm weather, less effort is required to maintain the desired temperature.