

# **BEDBUGS and KISSING BUGS**

#### BEDBUGS

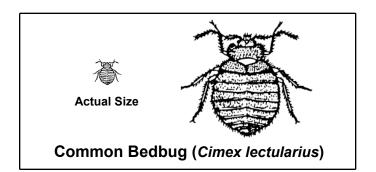
Bedbugs have long been associated with humans and their environment. These small 1/4 to 3/8 inch (when mature) reddish-brown wingless insects have learned that humans are just as acceptable as hosts as are birds or mammals. Prior to the development of chemical pest control during the early 20th Century, Bedbugs were a serious problem, even in high-class hotels. Although very annoying, Bedbugs are **not** known to transmit diseases to humans.

Bedbugs, except when recently fed, have a flattenedoval shaped abdomen with a smaller head and beak-like (piercing/sucking) mouthparts. They can squeeze into very tiny cracks or crevices, which can make them not only difficult to find, but also to control. These pests usually feed at night when the person is asleep. Their presence in a bedroom can sometimes be noticed by small blood spots on the bedsheets or nightclothes caused by the bite of the insect. Bedbugs may be spread from one home to another by such articles as clothing, baggage, or secondhand beds, bedding, and furniture.

The female may lay up to 200 eggs in her lifetime. Usually, many stages of development are noticed when an infestation occurs. Sometimes these pests are difficult to detect because they can go from two weeks to two months without food. This also means that an infested article temporarily stored may still maintain a live population which can infest a new dwelling.

The Common Bedbug (*Cimex lectularius*) is the species most frequently found in human dwellings. The Swallow Bug (*Oeciacus vicarius*) lives in swallow nests, but will sometimes invade human dwellings when the mud nests are built on the dwellings. Remove swallow nests while <u>under construction</u> or eliminate bird access to buildings. **WARNING: It is illegal to disturb swallow (and other bird) nests when eggs or young birds are present within the nest.** More rarely, other species of Bedbugs such as the Poultry Bug (*Haematosiphon inodorus*) will enter human dwellings.

When looking for the presence of Bedbugs, concentrate in rooms where people sleep or rest. Remember that they can hide in very tiny cracks and crevices. Inspect the bed, mattress, and bedding first, then broaden your search to such places as behind pictures, in furniture,TVs



TVs, moldings, door and window frames, under carpets etc. The presence of Bedbugs is also associated with a characteristic odor.

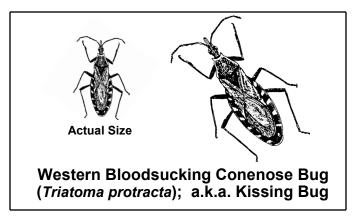
### **KISSING BUGS**

Kissing Bugs or Conenose Bugs are similar in habits to Bedbugs, but when fully grown are much larger and have well developed wings. Adults can be up to 3/4 inch in length. They are usually dark brown or black in color and a narrow, cone-shaped head armed with a formidable beak projects from the front of the body, hence the name Conenose Bug. The Western Bloodsucking Conenose Bug (*Triatoma protracta*) is the most common species found in the southwestern United States, including California. The Bloodsucking Conenose Bug or "Big Bed Bug" (*Triatoma sanguisuga*) is the most familiar species in the eastern United States.

Usually, Kissing Bugs live inside Wood Rat or Pack Rat (*Neotoma* sp.) nests, which in California occur mostly in foothill and mountain areas. Although Wood Rats are their preferred host, Kissing Bugs will feed on the blood of almost any kind of animal, including humans. The name Kissing Bug supposedly originated when a woman was bitten on her lip.

Kissing Bugs are nocturnal, and adults often fly down canyons at night. They sometimes enter human dwellings located at the mouths of canyons. Inside human dwellings, Kissing Bugs become crack and crevice dwellers like Bedbugs and cockroaches. Kissing Bugs emerge from hiding places at night and attack people in bed, much like Bedbugs will. When looking for a Kissing Bug infestation, generally follow the advice given for Bedbugs.

While biting, these insects inject a small amount of saliva into the wound to prevent the blood from clotting.



clotting. Many people are allergic to this saliva. Some hypersensitive individuals can go into anaphylactic shock and die from one Kissing Bug bite. SEEK PROFESSIONAL MEDICAL ATTENTION IMMEDIATELY IF YOU FEEL ILL AFTER BEING BITTEN BY A KISSING BUG.

Kissing Bugs are also capable of transmitting Chagas' Disease. Chagas' Disease is caused by a trypanosome (a type of protozoan) called *Trypanosoma cruzi*. This disease is one of the most important vector-borne diseases in Latin America, killing some 43,000 people every year. The famous 19th Century biologist Charles Darwin was attacked by a "great black bug of the Pampas" while in South America as a young man. Later in life, Darwin suffered from symptoms consistent with those of Chagas' Disease. Chagas' Disease is believed to occur in the southwestern U.S., but the U.S. strains of the disease are apparently much less virulent than Central and South American strains. Foreign immigrants and U.S. citizens traveling south of the border could potentially introduce more virulent strains into the United States.

Chagas' Disease is not directly transmitted by the bite of a Kissing Bug. The bug may defecate during feeding. While scratching the wound, the victim may contaminate his/her hand with infected feces and rub trypanosomes into the wound or later rub an open sore, the eyes, mouth, nose, or other mucous membrane. Initial symptoms of Chagas' Disease are swelling of the eyelids and face, and a fever, usually accompanied by conjunctivitis (eye infection). The disease can become chronic. Years after initial infection, the nerves of the heart, colon, and intestines may be damaged. The victim may die from heart failure or from blood poisoning caused by <u>months</u> of being unable to defecate due to paralysis of the colon and intestines.

## CONTROL

To effectively control light infestations of Bedbugs or Kissing Bugs, the following suggestions are offered:

- 1. Find the hiding places of the bugs in daytime.
- 2. Obtain an aerosol (spray) can of insecticide or a dust. Be sure to look for the word "Bedbugs" or "Kissing (or Conenose) Bugs" on the label of the container. Do not purchase the product unless the word for the specific pest causing the infestation and suggestions on control are indicated thereon.
- 3. Remove all bedding from infested bed.
- 4. Thoroughly apply the spray or dust to the slats, springs, and frame of the bed. If necessary, take the bed apart so no hiding places will be missed. If the mattress and box springs are infested, apply a light mist spray or the dust to the entire surface of the mattress and wherever possible on the box springs. Penetrate seams, tufts, and folds of these articles. Spray baseboards, the openings of cracks and walls, between floorboards, and behind pictures.

Do not apply any insecticide to sheets, pillow cases, pillows, or blankets. Wash all washable articles in hot water and air non-washable articles for at least a day. Mattresses **should not** be used for sleeping until the spray has **thoroughly** dried. If a dust is used, this must be either vacuumed or swept up before the mattress can be occupied. Alternatively, mattresses can be steam cleaned.

## CAUTION

Handle pesticides with care. Read all precautionary labeling and follow mixing directions exactly. Apply only in amounts specified. Do not use near open flame or exposed foods. Clean food preparation areas after use of pesticides. Store in their original labeled containers in a locked cabinet or shed, away from food or feed, and out of reach of children and pets. Dispose of containers when empty so that they pose no hazard to humans or animals. See label for disposal instructions.

No endorsement of trade names is intended nor is criticism implied of similar products not mentioned. If additional help is needed, contact with a licensed pest control operator is suggested.

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