

PEST CONTROL BULLETIN No. 1

BLACK WIDOW and BROWN RECLUSE SPIDERS And Other Spiders of Interest

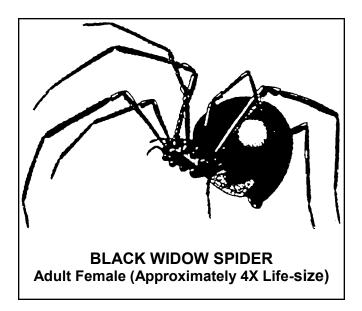
GENERAL INFORMATION

Spiders are among the most feared and disliked creatures found in and around human dwellings as well as in natural areas (Arachnophobia: fear of spiders). People believe that spiders are revolting, dangerous and are "just waiting to bite people." Spiders frequently enter homes and buildings and create unsightly cobwebs. Literature, poetry, and science fiction often cast spiders as villains. Indeed it was a spider that scared "Little Miss Muffet."

The truth is that spiders are usually harmless, and in fact can be very beneficial. Spiders kill and consume large numbers of insects, thereby being one of the major forces keeping insect populations under control. Rarely do spiders bite humans, except when humans molest them. The bites of most types of spiders are not serious (no worse than a bee sting), with the exception of those individuals who are allergic to spider venom. This is true even of the very large and much feared Tarantula. Anyone who is allergic to or has a reaction to spider venom (feeling of illness) should seek immediate medical attention if they believe that a spider has bitten them. In California, there are two species of spiders that are considered to be highly poisonous and dangerous to all humans. They are the Black Widow Spider and the Brown Recluse Spider.

BLACK WIDOW SPIDERS

The Black Widow Spider (Latrodectus hesperus) is a very common spider found in and around buildings and yards. Adult female Black Widows are about one inch in length, hairless, glossy black in color and usually, but not always, have a red hourglass-shaped marking on the underside of the abdomen. Adult male and immature Black Widows have a mottled brown and tan color pattern with the hourglass marking less apparent. Black Widows live in dark, secluded spots such as woodpiles, stacks of lumber, behind furniture, inside cabinets, under trash piles, and many other similar situations. They spin an irregular mesh web of silk that has a tensile strength greater than that of steel. A species of Jumping Spider (*Phidippus johnsoni*) that has a body covered mostly with black hairs, but with bright red hairs on top of the abdomen, is active during the daytime, and does not spin a web, is often misidentified as a Black Widow. The Jumping Spider's bite is not



spin a web, is often misidentified as a Black Widow. The Jumping Spider's bite is <u>not</u> considered highly toxic, but it is an aggressive biter and frequently causes people to seek medical attention for its bite.

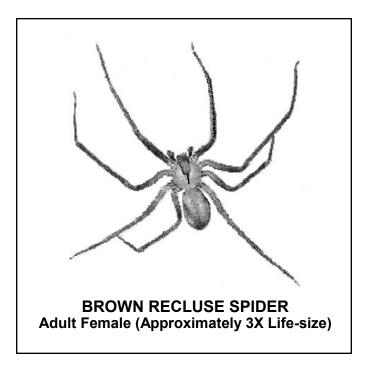
Bites from Black Widows are infrequent, but usually occur when somebody reaches into a dark, hidden space where the spider lives. The bite may go unnoticed at first, as symptoms do not set in for about one half hour. In fact, the Latin name, Latrodectus means "secret biter." The initial symptom is pain at the site of the bite. Two tiny red spots often mark the site; the puncture wounds from the spider's 2 fangs. As the venom spreads, the pain becomes more intense and widespread, sometimes throughout the entire body. Pain reaches its maximum in 1 to 3 hours, and gradually subsides for 12 to 48 hours. Other symptoms include increased blood pressure, perspiration, nausea, fever. chills, urinary retention, constipation, hyperactive reflexes, and a burning sensation of the skin. In severe cases the stomach muscles become rigid and the abdomen becomes "board-like." The victim may go into a coma. Symptoms tend to be more severe in small children. SEEK IMMEDIATE MEDICAL ATTENTION if you believe that a Black Widow has bitten you. Antivenin is often available to lessen the pain and speed recovery. Mortality is less than 1% from Black Widow bites, and most patients

lessen the pain and speed recovery. Mortality is less than 1% from Black Widow bites, and most patients fully recover within a few days. Black Widow venom is 15 times more toxic than rattlesnake venom, however, a Black Widow injects such a tiny amount of venom that a rattlesnake bite is considered to be much more serious.

BROWN RECLUSE SPIDERS

The Brown Recluse Spider or Violin Spider (Loxosceles reclusa) is native to the Midwestern and southern United It has occasionally been introduced into States. California, but has been eradicated and is not known to occur in California at the present time. Adult Brown Recluses have bodies that are 7 to 12 mm in length and have legs that are much longer than the body. Body color varies from light fawn to dark brown with the legs dark A dark colored violin-shaped marking is brown. prominent on the back of the cephalothorax (head) with the neck of the "violin" pointing backward towards the abdomen, hence the name Violin Spider. The South American Brown Recluse (Loxosceles laeta) has occasionally become established in Southern California. It is somewhat larger than L. reclusa, and its bite is considered to be even more toxic. At least 2 similar species are native to the southwestern United States, however their venom is not as powerful as that of the Brown Recluse. Loxosceles deserta is found in parts of California and the Southwest and Loxosceles arizonica occurs in Arizona. Report sightings of Brown Recluses to local or state public health or vector control agencies.

Brown Recluses often enter buildings, where they hide in dark corners. They can be found behind baseboards, on the undersides of tables and chairs, in stored clothes and shoes, in trunks, etc. People are often bitten when putting on clothes or shoes that have not been worn in a long period of time or when rolling over on top of the spider in bed. In areas infested with Brown Recluse, bites can be avoided by shaking clothing and shoes out before putting them on, and by inspecting dark places before reaching in with hands.



When bitten by a Brown Recluse, the victim may feel a painful reaction immediately or may be unaware of being bitten for 2 to 3 hours. The pain becomes more intense, a small blister rises, and the area around the bite becomes The victim may develop a fever, become swollen. restless, and have difficulty sleeping. The local pain around the bite can be very intense, and the tissue around the bite is killed and gradually sloughs away down to the muscle. Healing is slow, and can take 6 to 8 weeks. A sunken scar the size of a penny to a half dollar may result. Occasionally, victims suffer more serious systemic reactions, such as a rash that resembles that of Scarlet Fever. The kidneys can be affected, causing bloody urine to be passed. Death rarely results from a Brown Recluse bite, but small children, the elderly, and people in poor general physical condition tend to suffer more serious reactions to a bite. SEEK MEDICAL ATTENTION IMMEDIATELY if you think you have been bitten by a Brown Recluse Spider.

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