

SCORPIONS



DESCRIPTION AND IDENTIFICATION:

The scorpion's body is made up of three parts: the post abdomen, the preabdomen, and the cephalothorax. The cephalothorax, contains the head & thorax, & is covered by a carapace. The carapace (depending on the species) has six to none pairs of eyes. The Scorpion's body also has a, distinguishable tail with pinchers called, pedipalps, & like other arachnids, scorpions also have four sets of legs. Pectines, paired comb-like appendages located on the ventral (front/chest) surface of the scorpion, are believed to have several purposes such as, chemoreception (chemicals that act as signals to regulate cell function), auditory and tactile sensitivity, as well as many other attributes. Adult scorpions can range from 0.7 to 5.0 inches (213cm) in length and range from a pale yellow to cream to black in color. Length & color depend on the type of species. Scorpions are rarely seen at night due to their nocturnal nature. Scorpions usually live in/near spaces under rocks &/ bark as well as other debris. These arachnids are considered beneficial predators that feed off a variety of arthropods. The larger scorpion species have been known to feed off lizards & small rodents. Like most arachnids, scorpions only ingest the

body fluid of their pray. Scorpions use sensory vibrations in the air and on the ground to detect approaching predators & prey. Scorpions have live births with multiple litters. The newborn scorpions crawl onto their mother's back where they remain until after it's first molt.

There are approximately 75 known scorpion species. The severity to scorpion venom depends largely on the species involved, how much venom was released, and the susceptibility and size of the victim. The species that is of high public health concern is the *Centruroides exilicauda* (Baja California bark scorpion) & the *Centruroides sculpturatus* (Arizona bark scorpion). These two species have recently been identified through DNA analysis to be separate form each other and occur in western New Mexico, Arizona, in adjacent areas to Mexico, & west bank sides of the Colorado River. Bark scorpion sightings in residential areas have been reported in Los Angeles, Riverside, San Bernardino, & Orange County. Possible causes of importation of the bark scorpion include: recreational travel of boats, R.V's, trailers, etc.

The bark scorpions are the most venomous scorpion in the U.S. causing sever pain, some describe this pain as electrical shocks. The pain from this scorpion sting can last anywhere from 24 to 72 hours causing an initial loss of breath, due to severe pain, and temporary dysfunction in the area stung. Fatalities from scorpions are rare in the U.S. limited to those with comprised immune systems, children, & small pets. Sever reactions to the venom include frothing of the mouth, numbness, paralysis, convulsions, & shortness of breath. It is recommended to seek

medical attention when stung by a scorpion. The majority of stings happen during the summer & spring months when scorpions are most active. The majority of stings occur accidentally when startling a hidden scorpion by picking up something or swatting away.

Placing ice over the site where stung, for 10 to 15 minute intervals, may reduce pain. It is advised to NOT keep ice on continually or submerge wounded site in an ice bath. Antihistamines, steroids, sedatives, analgesics, and other medications may be used for discomfort. Antivenin for *Centruroides* spp. stings is manufactured in Mexico, but is not licensed for use in the U.S.

SCORPION MANAGEMENT:

If living in areas with scorpion populations the following precautions should help in controlling the amount of scorpions in & around the home: Remove piles of rocks, rubbish, firewood &/or lumber. These are likely areas for scorpions to live. Store firewood & lumber 18in minimum above ground level, eliminate leaks from outdoor facets, air conditioning units, as well as other outdoor water sources. You can minimize scorpions wondering inside the home, however infrequent, by weather stripping, sealing exterior cracks & crevices, & in extreme cases, because scorpions are unable to climb smooth surfaces, slight construction modifications may be warranted providing smooth surface walls. In severe and immediate situations a protective pesticide barrier maybe needed inside & outside the home. In cases such as this call your local vector control district for a consultation.