

Oklahoma Spiders - Dangerous to Humans?

As we may have remembered from school, spiders are grouped in the same animal phylum with insects, but their eight legs and wingless two-body sections further place them in the scientific class 'Arachnida'.

Falsely marked in books, movies and fabled superstition as hideous, revolting and aggressive creatures, Arachnids have endured the phobic ire of humans for many years. Just two families of 'Arachnida' lack venom glands; the remaining use venom released through their fangs for protection and to immobilize prey - so technically, all these are venomous. Only one species, the funnel-web *Atrax robustus* of Australia, is considered aggressive and reputedly may attack humans unprovoked. Yet only when provoked, injured or disturbed will North American spiders bite to protect themselves from harm. And even then, bites are rarely fatal and can vary in seriousness depending on the amount of venom injected and the health and age of the victim.

In Oklahoma, there are two known species considered dangerous to humans: the black widow and the brown recluse. Other species often mistaken for these may include the tarantula, wolf spider, and jumping spider. Learning about these intriguing creatures - how to differentiate them and avoid contact, what to do if bitten, and how to control infestation if necessary will protect you and your family, but also allow them to continue doing their beneficial predatory job controlling insect populations in our gardens.

Habitat and Identification

Brown Recluse (fiddleback) (*Loxosceles reclusa*)

Habitat: Appropriately named, the brown recluse spider is nocturnal, and settles in undisturbed places inside and outside the home, such as bathrooms, closets, attics, garages, in and under piles of stored items, under furniture, behind wall hangings, and outside under rocks and bark.



Avoid by awareness: tread carefully around storage areas, shake out shoes and clothing before wearing, be cautious when moving stored or stacked items that have been stationary awhile. Observe if molted skins are present, as this may indicate an infestation requiring professional extermination.



Identification:

- Adults are tan to dark brown, young are lighter shade
- Adult bodies are approximately $\frac{1}{2}$ " long
- Bulbous abdomen, delicate legs, covered in short dark hairs
- Fiddle marking on head, neck of fiddle points toward abdomen
- Semicircular eye pattern at base of fiddle
- Immature appear like adults, only smaller

Brown recluse fiddle markings

Bite Symptoms and Treatment:

The bite of a brown recluse spider may manifest differently amongst victims. The common reaction involves a stinging sensation and pain preceding a red, hard, swollen area and pus-filled blister within eight hours. Fever and difficulty sleeping often accompany tissue necrosis; a process wherein the layers of tissue die and cast off. Healing may take up to eight weeks, but immediate symptomatic medical care with corticosteroids (no antivenom is available) is highly recommended and can shorten recovery time and potential for scarring. When seeking treatment, victims should try to capture the subject spider for positive identification whenever possible.

Black Widow (*Latrodectus mactans*)

Habitat: Black widows are found mostly outdoors unless cold or drought prompts them to move indoors. They are found under home eaves, in rodent burrows, in trash dump areas, in low-growing shrub plantings, wood and rock piles, and water and gas meter housings. The females often remain with the web positioned belly-up, and generally bite when disturbed, or when protecting their egg sac.



Hourglass markings
(view underneath female abdomen)

Identification:

- Black, shiny and never hairy
- Large, round abdomen
- Adult females are 1 ½" long, males smaller at 1" long, including legs
- Females have characteristic red hourglass on abdomen, males do not
- Males have knob-like appendages on head
- Males have light streak pattern on abdomen
- Only female bite is dangerous to humans

Bite Symptoms and Treatment:

Considered as the most venomous spider in North America, the black widow spider delivers a painful bite with generalized symptoms often mistaken for other serious medical conditions like appendicitis or food poisoning. Those suspicious of a bite should contact a physician immediately. Although the initial bite sensation is little more than a pinprick, more serious pain within minutes radiates from the localized bite to the abdomen, back, legs, arms and chest. Symptoms escalate within hours and may include abdominal cramps, chills, respiratory difficulty, delirium and partial paralysis. The typical recovery time is 1 to 5 days. Although the mortality rate is at less than 1% of cases, the youngest and oldest of the population are at greatest risk. Specific antivenom is available, so if possible, the spider should be preserved and presented for positive identification whenever possible.

Immediate first aid for any spider bite may include ice or alcohol to the bite area to relieve pain and swelling; however, if bitten by a brown recluse or black widow, the victim should seek immediate medical attention.

Control - Disturb the Undisturbed

The first point of control is identification and understanding of spider habits and habitats. Since both the brown recluse and black widow reside in undisturbed areas, frequent, careful cleaning and upkeep of closets and storage areas will minimize settlement in those places. Rinsing eaves, door and window frames and porch and patio roof areas with a water hose and use caulk, stripping or other sealants to prevent home entry. When chemical control is necessary, select home insect formulations specifically indicated for spiders and thoroughly read and follow label instructions, ensuring safe and effective application. Seek professional assistance for tough infestations.

Spiders, as creepy as they may seem, are beneficials that play a critical role in garden and home insect population control. Learning to identify, avoid and control the two Oklahoma spiders dangerous to people - the brown recluse and black widow spider - will allow the remaining spiders to continue performing their valuable work in our gardens.

More information is available from the Oklahoma Oklahoma Cooperative Extension Service and others through the [links at the end of this article](#).

Resources

[EPP-7301: Spiders: Brown Recluse, Black Widow, and other Common Spiders](#)