



# MAFES Dawg Tracks

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## Brown Recluse Spider Protection



There are 20,000 different species of spiders that inhabit the Americas. Most of these are harmless to humans, but there are 60 species that are capable of biting humans. Within this group of 60 there are 4 species that are harmful to humans. These are the Brown Recluse, the Black Widow, the Hobo House Spider, and the Yellow Sac Spider. The Brown Recluse and the Black Widow are the only species that have been associated with significant disease and very rare reports of death:

- Deaths from Brown Recluse have only been reported in children 7 years or younger. They are native to the Midwestern and Southeastern states. Brown Recluse spiders are rarely found outside of these areas. When they have been identified, scientists say that they appeared in California and Florida.
- Fewer than 10 individual spiders have been collected outside of these native states. Most sightings are said to be false because that they were confused with 13 other species in the same family.
- The most common non-brown recluse spiders are the Desert Recluse which is found in Texas, Arizona, and California. No deaths have ever been reported from non-brown recluse spiders. Bites from these spiders produce mild to moderate local skin disease.

**FEATURES-** They have a violin shaped pattern on the back of their cephalothorax. The body part that their legs are attached to is yellowish-tan to dk. brown. Their legs are about 1 inch long and most of them have 8 legs.

**HABITS-** Brown Recluse spiders are aggressive by nature and will only bite when they are threatened. They like warm, dark, and dry environments such as barns, porches, basements, wood piles, attics, closets and old tires. The bites are most prevalent in the summer months.

**CAUSES-** The brown recluse venom is extremely poisonous and more potent than rattlesnake venom. But the recluse venom causes less disease because of the amount of venom injected is much less than that of rattlesnakes:

- The venom, once released into the skin, causes destruction of the cell membranes, ultimately breaking down the skin and blood vessels. This process causes cell death (necrosis) in the area surrounding the bite area.
- The venom also induces in the victim an immune response. The immune system releases agents that recruit white blood cells to the bite area, but sometimes these inflammatory agents can also cause injury.
- Destruction of red blood cells and a low platelet count.
- Blood clots in the capillaries and loss of ability to form clots where needed.
- Acute renal failure (kidney failure).
- Coma and sometimes death.

**SYMPTOMS-** Recluse bites sometimes go unnoticed at first as the bites are usually painless. Occasionally, some minor burning that feels like a bee sting is noticed at the time of the bite. Usually the symptoms will occur from 2 to 8 hours after the bite. Victims may experience some of the following symptoms:

- ✓ Severe pain at the bite site about 4 hours after the bite
- ✓ Itching
- ✓ Nausea
- ✓ Vomiting
- ✓ Fever
- ✓ Myalgias (muscle pain)

Initially, the bite is mildly red and upon close inspection may reveal fang marks. Most of the time the bite will harden and heal in a few days or weeks. The local reaction can be more severe with erythema and blistering, sometimes leading to blue discoloration and leading to necrotic lesion and scarring. Signs to look for are blistering, necrosis of the skin (death), and in rare cases, severe destructive necrotic lesions with deep, wide borders.

**SELF CARE AT HOME-** Home care is simple, but it should not replace doctor visits or emergency department.

- ❖ After a spider bite:
  - Apply ice to reduce the pain and swelling
  - Elevate the area thoroughly with cool water and mild soap.
  - Avoid any strenuous activity because this can spread the spider's venom in the skin.
  - Use acetaminophen (Tylenol) for pain.
- ❖ Do not perform any of these following techniques:
  - Do not apply heat to the area; it will accelerate the tissue destruction.
  - Do not apply any steroid creams to the area, such as hydrocortisone cream.
  - Do not attempt to remove the spider venom with a suction cup or to cut out the affected tissue.
  - Do not apply a tourniquet to the extremities involved.
  - Do not apply electricity to the area. High voltage has never proven to be effective. It can also cause secondary burns and increase tissue destruction.

**PREVENTION-** Reducing the chance of a brown recluse bite begins with destroying or eliminating their habitat.

- Perform routine house cleaning and do periodic inspections.
- Reduce clutter in garages and outbuildings, etc.,
- Store fire wood, building materials, etc., away from the home's foundation.
- Install yellow light bulbs outside, as they are less attracted to insects.
- Consider using a professional eliminator.