

Special Species

Black Widow Spider Can Kill Your Pet if You Don't Act Fast

Without the antivenom, this bite is fatal for most cats and many dogs. They'll need hospitalization, and even then the prognosis may be unclear for days. This 'cousin' inflicts bites that are just as disturbing, but with different symptoms. What to have on hand for both.

Analysis by Dr. Karen Shaw Becker

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STORY AT-A-GLANCE

- A venomous black widow spider bite triggers muscle spasms and paralysis. Other symptoms can include severe pain, difficulty breathing, and loss of coordination
- Your pet can be bitten by a black widow indoors or outside. Younger and older pets are at increased risk of fatal complications from a black widow bite. A dog or cat bitten by a black widow spider must be treated with antivenom, supportive therapy, and other medications as necessary
- A brown recluse spider bite is necrotizing meaning the bite wound will ulcerate and cause destruction of surrounding soft tissue. Some pets show no symptoms from the bite of a brown recluse, but when symptoms are present, they often include several hours of intense pain at the site of the bite.
- Routine wound care is given for brown recluse bites unless the pet is very ill, in which case he must be hospitalized to receive proper care

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Today I want to talk about two types of spiders, the black widow and the brown recluse, both of which have bites that can be poisonous to pets.

Black Widow Spider

In the US, there are actually three species of widow spiders that are highly venomous to both pets and people. There's the Western black widow, which is found in the western regions of the country; the Northern black widow, found in the northernmost areas of the US and southeast Canada; and the Southern black widow in the southeast US, from Florida to New York, and also in many of the southwest states. Widow spiders are found in every state but Alaska.

Female black widows are larger than males, measuring from three quarters to about an inch in length. They're shiny black and have a red or red-orange hourglass-shaped mark on the underside of the abdomen. Some females also have a red marking on the top of the abdomen, above the spinnerets (silk-spinning organs).

Younger female spiders are brownish in color, with red, orange, or yellow stripes across the top of the abdomen. These markings change into the hourglass shape as the spider matures and changes to a black color.

Male spiders are about half the size of females, have light brown coloring, and don't have the red hourglass marking. The males aren't considered a threat, since it's usually the female that bites.

Symptoms of a Black Widow Spider Bite

Black widow spider bites can be dry, meaning no venom is injected. When there is venom present, it is a potent neurotoxin that triggers a massive release in a dog's or cat's body of acetylcholine and norepinephrine. This is what causes muscle spasms and paralysis.

Pets can be bitten indoors or outside. Younger and older pets are at increased risk for severe symptoms due to their typically weaker immune systems. Animals with systemic high blood pressure are also at increased risk of fatal complications from black widow spider bites.

Symptoms of a venomous black widow bite in pets include the following:

- Early marked paralysis
- Muscle tremors and cramping
- Rigid and painful abdomen
- Severely painful muscles in the back, chest, and abdomen
- Difficulty breathing and/or respiratory collapse resulting from paralysis of the abdominal muscle
- Excessive drooling
- Restlessness
- Increased blood pressure and heart rate
- Loss of coordination and the ability to stand
- Vomiting and diarrhea

A black widow spider bite can be fatal if antivenom treatment isn't given quickly.

Diagnosis

Symptoms of a black widow spider bite can be difficult to diagnose because they are symptoms that are seen in many other illnesses and diseases in pets, including other types of poisonings.

Your veterinarian will do a chemical blood profile, a complete blood count (CBC), a urinalysis, and a thorough physical examination. He or she will be on the lookout for marks on your pet's skin that may indicate the location of the spider bite. Muscle and abdominal rigidity are classic signs of a venomous black widow bite.

Black Widow Spider Bite Treatment Options

If you suspect your pet has been bitten by a black widow spider, contact your veterinarian or emergency animal hospital immediately. I also suggest administering the homeopathic remedy Latrodectus mactans as soon as possible.

A pet that has been poisoned by the bite of a black widow spider will be hospitalized and given supportive care. This may include oxygen to assist breathing and intravenous (IV) fluids to lower blood pressure.

Muscle spasms and pain will be controlled with IV muscle relaxants and painkillers. Anti-seizure medications will be given as needed. Antivenom drugs should be administered very carefully, with constant monitoring for reactions. Without the antivenom, a black widow bite is usually fatal in cats and also in many dogs.

Your veterinarian will monitor the wound site until it has completely healed. The prognosis is often uncertain for days after treatment begins, and weakness, fatigue, and insomnia can persist for many months.

Brown Recluse Spider

The brown recluse spider is also known as the "fiddle back" or "violin" spider after the violin-shaped marking on its back. It is typically found in the Midwestern US, as far west as Colorado and New Mexico, and as far east as northern Georgia. It is also found throughout the southern US, as well as up the Mississippi River valley to southern Wisconsin.

The brown recluse is brown in color, with a violin-shaped marking on the upper portion of the body, with the neck of the violin extending down to the base of the tail. Not all recluses have the marking, for example, young brown recluse spiders do not. But generally speaking, the violin-shaped marking is a good way to recognize them.

These spiders also have a unique pattern of six eyes instead of three. They're less than an inch in length, with very long legs.

Symptoms of a Brown Recluse Spider Bite

Despite their fierce reputation, brown recluses really are reclusive and typically non-aggressive, preferring to stay away from people and pets. They are active at night, and bites usually occur when a spider gets trapped in bedding and an animal or human rolls over on it.

A spider will also bite if an animal disturbs it in its space. Cats may be at higher risk because of their tendency to crawl into dark, small spaces, such as under the bed or behind cabinets.

A brown recluse spider bite is necrotizing, which means the bite wound will ulcerate and cause the death of surrounding soft tissue. The wound is very slow to heal, which increases the risk of secondary infections.

Serious complications arise when an ulcerated wound progresses to gangrene, or when the venom enters the bloodstream and/or internal organs. Rarely, this can lead to destruction of red blood cells, kidney failure, coagulation disruption, and even death.

Some pets show no symptoms from the bite of a brown recluse. When symptoms do occur, they can include several hours of intense pain and stinging at the site of the bite. This can actually help you locate the bite mark – you might need to shave the area or part the fur to visualize the wound.

The intense pain is followed by itching and soreness at the wound site. The lesion that forms will be white in color, with a dark scab in the middle, and a zone of reddish inflammation around the bite. After two to five weeks, the central scab may slough off, revealing a deep, slow-healing ulcer that typically kills surrounding soft tissue.

Other signs that may occur within two to three days of the bite include fever, chills, rash, weakness, rapid production of white blood cells (which can be picked up on bloodwork), nausea, and joint pain. Rarely, anemia with bloody urine is also seen within the first 24 hours after a bite.

Diagnosis

The bite from a brown recluse can look like a number of other bite wounds. Unless you actually saw the spider bite your pet, it's likely your vet will search for a range of other possible causes for the symptoms your dog or cat is experiencing.

A chemical blood profile, complete blood count (CBC), and urinalysis will be conducted. A coagulation profile may be necessary to check your pet's blood clotting activity.

If you live where there are brown recluse spiders, you might want to ask the vet to check for the presence of venom in your pet's bloodstream. This is done with an enzyme-linked immunosorbent assay (ELISA) test. But unless you bring up the possibility of a spider bite, your vet may not think to test for venom.

Unaddressed, the venom from a brown recluse can cause severe damage to pets. The tissue death can spread well beyond the initial bite wound, and in some cases of substantial tissue devitalization, an entire limb can be affected. In a worst-case scenario, amputation may be necessary. The faster a spider bite is found, the better the chance of preventing complications.

Treating a Brown Recluse Bite

Routine wound care will be given unless your pet is extremely ill. Very sick animals must be hospitalized to receive IV fluid therapy and blood transfusion(s) if necessary.

If the venom is mild, cold compresses can be used to reduce inflammation and pain, and several different homeopathic remedies can be very beneficial at that point in time.

If there has been significant cell death at the wound site, your veterinarian will need to surgically remove all the dead tissue. If the venom was very potent, resulting in a great deal of cellular and tissue damage, your pet may need skin grafts after the lesion reaches full maturity.

Hyperbaric oxygen therapy and ozone therapy can be very beneficial for speeding wound healing and aiding in a full recovery in some severe cases.

If you know your pet was bitten by a spider but you don't know what kind, and your pet is acting normal, consider doing some basic home care. I recommend shaving the area around the bite and applying a paste of activated charcoal. Mix some finely ground activated charcoal with just enough water to make a thick paste. Coat the entire wound with the paste, and disinfect the area every 12 hours with diluted povidone iodine, also called Betadine.

You can also consider making a topical poultice using the herbs plantain and Echinacea tincture. I recommend securing the poultice to your pet's body so that this very potent herbal solution can remain in contact with the wound continuously. Change the poultice three to four times a day and, of course, disinfect twice a day until the bite wound heals.