

Most Dogs Tolerate Even Black Widow and Brown Recluse Bites

By Susan Chaney

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Spider bites on dogs are a tricky business. First of all, it's almost impossible to know that a dog has been bitten by a spider unless the dog's owner actually sees the spider on the dog, then finds a welt in the same spot.

"We can almost never confirm that it's a spider bite in the first place," says Meredith Thoen, D.V.M., a diplomate of the American College of Veterinary Emergency and Critical Care who oversees emergency care for Midwest Veterinary Referral Center in St. Louis. No good test exists to discern whether a dog's been bitten by a spider, let alone what kind of spider it may have been, Thoen says. Although, she says, "Sometimes, we'll find puncture marks."



A black widow spider sports an identifying red or red-orange hourglass-shape on its abdomen. Photo courtesy of Texas A&M University.

Fortunately, two things are in dog owners' – and their dogs' – favor. First, the bites of only two spiders in the United States typically can cause a reaction sufficient to warrant a trip to the veterinary clinic: the black widow and the brown recluse. Second, most dogs won't have a problem after being pierced and injected with venom by either of these. Why some dogs do have serious reactions is unknown. It may depend on how much venom is injected, or it may be that dogs with compromised immune systems are more susceptible.

A third spider, the hobo spider, has not been officially identified as a threat to dogs. "There is essentially no information regarding hobo spiders in veterinary textbooks," Thoen says. However if you search the Internet, many suspected cases are mentioned. Again, because the type of bite can't usually be identified, the dogs cited could have just as easily been bitten by a widow or recluse.

Tohen advises that a number of skin conditions, such as infections and cancer, may look similar to spider bites, and are much more common than a severe reaction to spider venom.

Where They Are

Black widow spiders are more plentiful in the southern and western U.S., but can be found throughout North America, according to the Centers for Disease Control and Prevention in Atlanta. The red or red-orange hourglass-shaped mark on their black, shiny abdomens makes black widows easy to identify, and they sometime have a bit of red on their “backs” as well. They like to make their sticky homes in places that aren’t often disturbed, such as under a house’s eaves, on fences and in woodpiles, according to the CDC, or in any kind of debris that’s allowed to pile up. Because they build webs between objects, bites “usually occur when humans come into direct contact with these webs,” the CDC reports. Although a black widow leaves an obvious bite mark with two punctures on people, those typically are not easily found on a dog.



The brown recluse is identified by the dark violin-shaped mark on the part of its body where the legs attach. Photo courtesy University of California, Riverside.

The brown recluse spider is, at its name implies, brown and lives mainly in the Midwest and South. It is sometimes called a “violin spider,” because of the dark shape on its head that resembles a violin or fiddle. According to the CDC, brown recluses have six equal-sized eyes, while most spiders have eight. They tend to weave their webs in “secluded, dry, sheltered areas such as underneath structures logs, or in piles of rocks or leaves.” Indoors, a black recluse will build its web in a dark closet, in a shoe or in the attic. Unlike the black widow, the recluse requires pressure against its body to bite, according to the CDC. This pressure would be created, for example, if your dog happened to lie down on one, which, Tohen says, is usually how dogs get bitten by any spider.

According to the CDC, the hobo spider is most at home in the Pacific Northwest. Brown with a “distinct pattern of yellow markings” on its back, it’s a large spider without dark bands on its legs. Hobos’ webs are quite different from the widow’s or the recluse’s, being funnel-shaped and placed in holes, cracks

and recesses. Outdoors, you'll find them in "retaining walls, and in foundations, window wells, and stacks of firewood and bricks. Indoors, they can nest between boxes or other storage items, on window sills, under baseboard heaters or radiators, behind furniture, and in closets." They run, rather than climb, and, the CDC reports that they are "much more likely to attack if provoked or threatened."



Yellow markings on the back of the hobo spider can help identify it, though it's easy to mistake many other arachnids for a hobo.

After the Bite

Tohen says that owners don't often know that their dogs have been bitten by a spider. "They may or may not witness their dog experiencing something painful," she says. Once bitten, some dogs may scratch or lick at the bite if it continues to be painful. But, they may also get bitten and go on along their merry way. Initially, some behavioral reaction to the bite itself or licking the site of the bite would be the only indications that a dog's been chomped on by a spider, she says. Depending on the situation, the spider may or may not have had a chance to inject any venom, and, again, there's no way to know if any or how much venom is now in the dog's bloodstream – because there's no test.

In humans, these spider bites have very specific clinical signs, according to the CDC. You can experience a hobo bite without even knowing it, then get a "moderate to severe, slow-healing wound." With a brown recluse, you'll get a "severe lesion" caused by destruction of skin tissue, requiring medical treatment. If you're unlucky enough to tread through a widow's web and get bitten, the pain will start at the bite site, then spread "to the chest, abdomen or the entire body."



This dog may have been bitten by a spider. Although the skin shows the kind of damage that can result from a brown recluse bite, it's never possible to know definitively that it was caused by a spider bite as no tests exist. Photo courtesy Anne Wood, D.V.M.

In a dog that's going to react to a black widow bite, you may not see anything at all for eight to 10 hours, Thoen says. Then, the dog will start showing evidence of severe pain, maybe with a bit of swelling. A dog that cries when touched, doesn't want to move, isn't eating or isn't as active as usual may have been bitten. The dog may also shake and pant. If the dog got sufficient venom, its muscles will start to cramp and the pain can spread to its entire body. That pain is what gets most dogs to the veterinary clinic, Thoen says. It's a good thing, too, because at this point, the dog's blood pressure and heart rate will spike.

A brown recluse bite is "more skin-related," Thoen says. "Very commonly they will develop blistering, redness and swelling that will ultimately turn black as the skin dies. That can progress over the course of days." In this case, she says, in even a hairy dog, you will find this dying skin. Sometimes a dog's owner will find a lump under the skin before it gets to that point, but more typically it's the redness and blackness that lead to treatment. Without the supportive care that a veterinary clinic can provide, the dog will eventually have rising blood pressure and heart rate, just like a dog bitten by a widow.

These types of reactions point to another deficit in the whole dog-spider paradigm. "We don't have easy access to good antivenins here" in the U.S., Thoen says. A black widow antivenin does exist, but most veterinary clinics don't keep it on hand.

'Treating' Reactive Dogs

With any suspected spider bite, the main treatment is pain medication and supportive care for "any

other complications that develop,” she says. A dog that’s blood pressure has risen and whose heart is racing is in danger of collapse.

A veterinarian treating such a case would consider giving the dog fluids and “potentially antibiotics, depending on the degree of the skin problem,” Thoen says. Of course, the dog will get pain medication to make it more comfortable, and possibly steroids as well.

Dogs can develop blood-clotting problems, ruptured red blood cells and other complications.

Fortunately, respiratory problems, often associated with injected “bug” toxins, would likely be from a black widow and only in a “very, very severe case,” involving a dog that’s paralyzed from the toxin, Thoen says.

The final deficit? Even if a dog dies after a suspected spider bite, no reliable test exists to identify the toxin. However, some are being researched.

Lest all this scare you, Midwest Veterinary is “smack in the middle of brown recluse territory,” she says, and in the last 18 months, she and her colleagues have only seen one or two cases in which they suspected the dog had been bitten by a brown recluse.

Skipping the Bite

Although most dogs can withstand a spider bite without much consequence, there’s no point in asking for it. If you don’t know already, find out whether black widows or brown recluses are a problem where you live, then take steps to ensure that you don’t unwittingly provide “homes” for the arachnids. Also, Thoen says, if you live where they’re common and you know, for example, that black widows like your shed, just keep your dogs out of the shed “at all times.”

Better safe than sorry, right?

To find out about the insects that can cause your dogs pain – and worse – read [Insect Stings: When to Get Vet Care.](#)”

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