

8-legged boogeyman isn't that scary

By Rick Vetter

About a decade ago, a pest control manager emailed me saying he had a big problem. At six military facilities he oversaw, strange wounds were popping up on people's skin. The facilities' doctors diagnosed them as spider bites. But the manager had searched the barracks, and couldn't find any spiders.

I'm an arachnologist, and my specialty is the brown recluse spider—a creature that hides in cracks and crevices. So I told him: Forget the spiders, and have the doctors check those afflicted for a bacterial infection instead. It turned out they had methicillin-resistant *Staphylococcus aureus* (commonly known as "MRSA").

People are terrified of brown recluse spiders when they shouldn't be. In the almost 25 years I've been studying the creatures, the recluse, whose scientific name is *Loxosceles reclusa*, is a medium-sized spider, about three-eighths of an inch in body length, found throughout the central American Midwest, between Nebraska, Ohio, Georgia, and Texas. It is not impossible, but still very rare, to find them elsewhere.

But harmless brown spiders are frequently misidentified as brown recluses around the country.

In the regions of America where brown recluse spiders do exist, people have every right to be cautious. Brown recluse bites can cause significant damage to skin. If the venom causes a reaction throughout the body, a bite can be fatal, especially in small children. But these are extreme cases. Only about 10 percent of bites have moderate effects on their victims. Fewer than one in 100 becomes systemic.

I've known Midwesterners who successfully raised kids in recluse-infested homes without incident. One family in Kansas collected more than 2,000 brown recluse spiders in their 19th century house in six months, yet lived there for 11 years before someone received a bite. The wound only caused a finger to turn red and swell a little.

So why do so many people break into a sweat at the thought of the coin-sized creature when they're far more likely to get killed by a bolt of lightning? Undoubtedly there's an element of fear of the unknown—the monster that could be hidden in any hole or crevice. And then there's the media. In the news, only extremely nasty bites are ever reported—and typically they aren't even actual bites.

Physicians have contributed to the misperception too. Misdiagnosis of skin lesions as brown recluse bites has been a chronic, widespread problem in North America since 1957, when the first article was published definitively proving that brown recluses cause them.

The myth of the brown recluse's ubiquity poses a real danger. Unlike most recluse bites, some conditions with similar symptoms are fatal—or, result in permanent damage. Conditions that are confused with recluse bites include Lyme disease, leukemia, bacterial infections like MRSA, diabetic ulcers, and cancer. When a lesion is misdiagnosed as a recluse bite, it allows a person's actual condition to continue unrestricted.

Thankfully, after decades of crusading for better awareness of just how rare brown recluses are found outside of the central Midwest, I'm finally starting to see my work have an effect. Now medical guides caution doctors to consider many possibilities before declaring a skin lesion as a bite. While there are still questionable local reports of bites around the country, publications including Wired and Slate have cited my research to help dispel fears of recluses.

Knowing that people are starting to get the message is very satisfying to me. And it should allow you to sleep well at night, too. If you don't live in areas of the country with proven brown recluse spider populations, calm down. If you live in indigenous recluse areas, take precautions to minimize spider bite possibilities, but don't let it consume you.

Now, at least you have one less thing to dread about the world.

Rick Vetter is a retired research associate from the entomology department at UC Riverside. He has been working on brown recluse spider issues for nearly 25 years and has recently published a book, "The Brown Recluse Spider". This essay is part of The Things That Haunt Us, a project of Zócalo Public Square.