

# Spiders -- Who is Biting YOU?

We attended a continuing education class on spiders. Our speaker was Rick Vetter, an entomologist. He explained to us that spiders are extremely difficult to identify. It is easier to eliminate what kind of spider the spider isn't rather than classify what it is.

There are over 50,000 species of spiders classified into over 100 families in the world. An arachnologist takes years of concentrated study to learn how to identify spiders. They are identified by structure, not by markings. The determining features involved are:

- 1) Arrangement of eyes
- 2) Number of claws
- 3) Location and arrangement of certain specialized hairs and spines
- 4) Structure and arrangement of the spinnerets  
(silk spinning organs at the rear end)
- 5) Other characters that you cannot see with the naked eye

Species are separated mostly by the fine structure of the sex organs, which can only be seen with high magnification under a microscope. Very few entomologists and physicians are also arachnologists. This helps to explain how doctors' misdiagnosis spider bites.

Spiders found in your bathtub did not arrive there via the drain. Think about it...drains contain a liquid-filled sediment trap through which spiders cannot penetrate. They end up in bathtubs and sinks because they are looking for water. The probable way they reached the tub or sink is by crawling down your wall. Once in the tub or sink, they are trapped because the slick sides prevent them from escaping.

Spiders are not bloodsuckers; they prey on insects and other small creatures. They have no reason to bite humans, unless provoked. Spiders are the ones who usually suffer. Very few species have venom that can harm humans, dogs, or cats. Spiders, whose venom happens to be more toxic to us, are no more likely to bite us on that account; they are unaware of our existence.

Webs are used for catching prey by about half of the spider species, the remainder of them are either active hunters or some of them will sit and wait for their prey.

A set of images of a horrid injury to a thumb has been circulating since June 2003. These identical pictures surface over and over again, but with different details attached...like what kind of spider bite and where the bite occurred:

- supposedly 'brown recluse' spider bite  
(military base in Missouri, Wisconsin, Texas, Montana, Ohio,  
California, Alberta Canada, Costa Rica)
- supposedly 'hobo' spider bite in British Columbia
- supposedly 'African' spider bite in Belgium
- supposedly 'solpugid' bite on an American soldier in Iraq

A word to the wise... be very suspicious about what you are reading on the internet, you have no idea what is true and what is not. Don't believe it because 'it is written'... by whom and what are their credentials? These photos have been known to be used as PowerPoint presentations in

paramedic classes, which spread misinformation rather than educating people. Other factors to question are:

- 1) Where did the bite occur?
- 2) Was a spider caught in the act of biting?
- 3) Was a spider at the scene of the crime?
- 4) Was the victim tested for additional etiologic agents of necrosis such as bacterial infection?
- 5) Did a doctor actually make the diagnosis or was it a self-diagnosis from the victim?
- 6) Did the diagnosis come from an area of the country that actually has brown recluses?

In our educational class it was explained to us that the diagnosis of 'brown recluse' spider bites in Western Washington is incorrect due to the fact that not only do they not exist here, but that they can NOT exist in our climate. Doctors see the puncture wound, look it up in their medical books and compare pictures of wounds by spiders and deduce that it was a 'brown recluse'. The puncture wound is NOT a determining factor.

Phillip Anderson, a Missouri dermatologist who has specialized on brown recluse bites for over 30 years gives the following information pertaining to brown recluse bites.

- \* Almost all brown recluse bites heal very nicely without medical intervention.
- \* Only 3% of brown recluse bites require skin grafts.
- \* Despite the fact that lots of people believe that brown recluses are deadly, there are only about 8 reported deaths from possible brown recluse bites in the medical literature. Phillip Anderson states that there is still not one VERIFIED death from a brown recluse bite and none of the alleged fatal cases are convincing.
- \* Often physicians will make a recluse bite worse by going in and messing with it by removing tissue. The outcome for most recluse bite situations is very promising with general care. One condition of skin necrosis, pyoderma gangrenous, gets worse when tissue is removed so misdiagnosis in this condition and debridement of tissue makes it worse.