# SPIDERS (BLACK WIDOW AND BROWN RECLUSE)

#### Are all spider bites dangerous?

What is the difference between a black widow and a brown recluse spider?

#### **Black Widow spiders**

What happens when someone is bitten by a black widow spider? What should I do if I'm bitten by a black widow spider? How dangerous is the bite? What is the treatment for black widow spider bites?

#### **Brown Recluse spiders**

What happens when someone is bitten by a brown recluse spider? I have a lesion on my skin that I think is from a brown recluse bite. What should I do? What is the treatment for a brown recluse bite?

### Are all spider bites dangerous?

The majority of spider bites are not dangerous at all. Most spiders' fangs aren't long enough to penetrate the skin or their venom doesn't cause serious toxicity. There are two species of spiders in the US that may cause more significant symptoms than just skin irritation and pain: the Black Widow and the Brown Recluse. Black widow (*Latrodectus mactans*) and Brown recluse (*Loxosceles reclusa*) spiders generally like to hide out in dark, dry locations such as wood piles, storage sheds and dark corners of garages. When entering or working in one of these areas, it is important to wear proper footwear and consider wearing gloves if you can't see where you are reaching with your hands.

## What's the difference between a black widow and a brown recluse spider?

When it comes to black widow spiders, the females cause the most toxicity. They are large and black in color and often have a distinctive red hourglass marking on their abdomen. Some species possess only a red, yellow or orange mark, without the hourglass shape. The males are much smaller and do not cause significant toxicity. Black widow bites are more common during warmer months of the year.

Brown recluse spiders are, not surprisingly, brown and have a characteristic "fiddle-shaped" marking on their back leading to their other name, the Fiddleback spider. The brown recluse is more active at night and bites are generally defensive, occurring when the spider is trapped between bedding or clothing. These spiders are essentially only found in the Midwest and South Central US.

#### **Black Widow spiders**

#### What happens when someone is bitten by a black widow spider?

Black widow bite often result only in pain at the bite location. Sometimes a more serious reaction to the venom occurs, which may lead to severe muscle spasms and pain in the back, abdomen, and extremities. One may also experience sweating, fast heart rate and high blood pressure, with symptoms generally starting within 1-2 hours of the bite. Very rarely, an allergic reaction to the venom may occur.

What should I do if I'm bitten by a black widow spider? How dangerous is the bite? If you are bitten and have any symptoms, you should call your local poison control center at 1-800-222-1222 for treatment recommendations. They may recommend that you seek medical care in an Emergency Department or with your primary physician. Despite their reputation as one of the most feared spiders, black widow bites are generally not life-threatening. Death following a bite is extremely rare.

#### What is the treatment for black widow spider bites?

Black widow spider bites are treated with supportive care and pain medications. Occasionally, patients may require admission to the hospital for IV pain medications. Severe symptoms that persist despite pain and sedative medications may be treated with a specific antivenom. The antivenom itself may produce allergic reactions however, so risks and benefits of use must be weighed carefully for each patient.

#### **Brown Recluse spiders**

#### What happens when someone is bitten by a brown recluse spider?

Most patients who are bitten by a brown recluse spider do not develop a wound. In a minority of patients, enzymes and chemicals present in venom can damage skin and underlying tissues. After a bite, the skin may turn red, swelling may develop, and inflammation of the area can progress over hours to days leading to an ulcer and, in rare cases, severe tissue damage. It is extremely rare that patients develop symptoms other than skin lesions.

I have a lesion on my skin that I think is from a brown recluse bite. What should I do? First, realize that unless you live in specific areas of the country where brown recluse spiders are known to live, it is extremely unlikely that your skin lesion is due to a brown recluse. Even in those locations, bacterial infections such as cellulitis and skin abscesses are much more common. Sometimes other diseases may cause similar skin lesions. If you have concerns, you should call your local poison control center at 1-800-222-1222 or seek medical attention with your primary doctor or in the Emergency Department. Unfortunately, there are no lab tests to determine if a lesion is due to a spider bite.

#### What is the treatment for a brown recluse bite?

Generally, most bites result in skin damage that heals by itself without any medical intervention. There have been many proposed treatments ranging from hyperbaric oxygen and various medications to electric shock. These treatments have not been shown to clearly improve the outcomes of the envenomation. In some cases, a surgeon may want to remove some of the damaged tissue; about 3% of cases may require skin grafting.