

# Spider Bites and Scorpion Stings

## Is a spider bite or scorpion sting dangerous?

There are thousands of types of spiders. All spider bites are poisonous, but usually they are not dangerous to people. Most spiders have too little poison (toxin) to cause a dangerous reaction. Many are too small to be able to break your skin with their fangs. Only a few spiders cause dangerous bites. Because most spider bites are not dangerous, the bites usually do not need medical treatment.

Likewise, not all scorpion stings are life threatening. For example, there are about 40 different types of scorpions in the southwestern part of the US. Just 1 of these types has a sting that can be lethal.

Spiders and scorpions in the US whose bites or stings can be serious are:

- Black widow spider
- Brown recluse spider
- Hobo spider
- Bark scorpion

A **black widow spider** is a shiny, black spider with a fat body and a red or orange hourglass figure on its underside. It is about an inch long, including the legs. It is found in most parts of the US. It is often found in woodpiles, sheds, fruit and vegetable gardens, garages, and outdoor toilets. The bite of the female spider is more serious than the bite of a male spider.

The **brown recluse spider** is also called a brown, fiddleback, or violin spider. It has long brown legs and a dark brown, violin-shaped spot on its head. It is about 1/2 inch long, including the legs. This spider is most active at night and is found in cracks, crevices, basements, attics, and dark closets of houses in the Midwestern and southern parts of the US. It may also be found outdoors in piles of rock, leaves, or wood.

The **hobo spider** is brown with grey markings. Found in the northwestern US, it is seen more often in midsummer and fall. The hobo spider likes dark, moist places such as basements, crawl spaces, and woodpiles.

**Scorpions** are related to spiders. They have a long body and a tail that curls up when they are about to sting. There are over 1200 species of scorpions worldwide and over 40 species in the US. For most people, only the bark scorpion has a sting that is dangerous. The bark scorpion can be found in junk and wood piles and in rocky areas in the southwestern US.

## What are the symptoms of a spider bite or scorpion sting?

There are 3 main types of reactions to spider bites or scorpion stings:

- Local reaction to the venom (affecting just the area of the bite), causing redness and other mild symptoms
- Local allergic reaction causing allergic symptoms in the area of the bite, such as itching

- Systemic allergic reaction (affecting the whole body and potentially life-threatening), causing throat swelling and trouble breathing

At first the symptoms of a poisonous spider bite or scorpion sting can be like the symptoms of nonpoisonous spider bites or scorpion stings:

- Minor pain or soreness around the wound
- Mild swelling
- Tiny red bite or sting mark
- Tenderness
- Redness of the skin
- Numbness
- Tingling

Depending on whether you were bitten by a spider or stung by a scorpion, symptoms of a more serious or systemic reaction to the bite or sting may include:

- Severe pain in the muscles around the site of the bite
- Itching or swelling of the mouth and throat
- Wheezing or trouble breathing
- Lightheadedness or dizziness
- Anxiety or restlessness
- General weakness
- Nausea and vomiting
- Headache

These symptoms may result from the poison in the bite or sting itself, or they may result from an allergic reaction to the bite. Symptoms of the bite will start within a few hours to a day after the bite. Allergy symptoms will start right away or soon after the bite or sting.

Symptoms of a minor spider bite usually go away in 2 to 3 days. If symptoms worsen or new symptoms develop within 10 minutes to several hours after a bite or sting, see your healthcare provider or go to the emergency room right away.

If you have swelling of the mouth or throat or trouble breathing, call 911.

## **How is it diagnosed?**

Your healthcare provider will examine you, ask about your symptoms, and ask if you saw the spider or scorpion. There are many things that can cause a reaction that looks like a spider bite or sting. Other causes of the rash or reaction need to be ruled out, such as:

- Allergic reaction to something else
- Anxiety or panic attack
- Infection (viral or bacterial)
- Blood vessel inflammation (vasculitis)
- Ingrown hairs and other causes of skin abscesses

## How should I treat a spider bite or scorpion sting?

Self care for a minor bite or sting that causes just a local reaction is as follows:

- If you can, safely catch the spider or scorpion in a jar, in case you need to find out what kind of spider or scorpion it is.
- Wash your hands thoroughly with soap and warm water for at least 15 seconds before you touch the area.
- Keep the area of the bite clean and dry. Wash the bite twice a day with mild soap and water unless your provider tells you to do something else. When you are cleaning the bite, look for signs of infection, such as new or worse redness, swelling, pain, warmth, or drainage. If you have any signs of infection, call your healthcare provider.
- Put cold, moist washcloths or ice wrapped in a cloth on the bite to keep the swelling down.
- Put a nonprescription hydrocortisone cream on the skin or take nonprescription antihistamines for itching.
- Take acetaminophen or nonprescription anti-inflammatory medicine, such as ibuprofen or naproxen, to help decrease pain. Nonsteroidal anti-inflammatory medicines (NSAIDs), such as ibuprofen, naproxen, and aspirin, may cause stomach bleeding and other problems. These risks increase with age. Read the label and take as directed. Unless recommended by your healthcare provider, do not take for more than 10 days for any reason.
- Check with your healthcare provider to make sure that your tetanus shots are up to date.
- Watch for symptoms of a systemic reaction within the first 24 hours.

If you are having any of the more serious symptoms:

- Put a large soft bandage over the bite.
- Try not to move the area (like an arm or leg) where you were bitten.
- Put ice wrapped in cloth on the wound to slow absorption of the toxin.
- Contact your healthcare provider or go to the nearest emergency room right away. If you can do it safely, take the spider or scorpion with you so your provider can determine what type of spider or scorpion bit you.

Some bites and stings, like a black widow bite, can cause symptoms that worsen for the first 24 hours. In this case, you may need to be observed in the hospital during that time.

If you get medical care for a bite or sting, it may include:

- A tetanus booster shot if the skin is broken and infection develops
- Treatment for any allergic symptoms you may be having or any signs of infection, which may include:
  - A nonprescription pain reliever, such as aspirin or acetaminophen
  - Prescription pain reliever for severe pain
  - Medicine to stop an allergic reaction
  - Oxygen and breathing treatments

- Wound care if you have a sore or ulcer (hole in the skin) from the bite
- Antibiotics to treat infection
- A shot of calcium gluconate to help with severe muscle pain
- Antivenom to stop the effects of the spider or scorpion poison

Antivenom is made from horse blood. Your body will absorb most of the venom from a bite within 30 minutes, so antivenom must be given as soon as possible. It is given only if you are having severe symptoms. Sometimes antivenom causes a severe allergic reaction.

## **How long will the effects of a spider bite or scorpion sting last?**

Local reactions last 7 to 10 days. They are usually minor and go away without complications in a few days.

More severe bites can cause more pain, fever, and muscle aches for a few days and more serious injury to your skin. Some bites may cause blisters to form within the first 15 to 36 hours. Within a day after they form, the blisters open and ooze, causing a sore. The venom may cause the skin and underlying tissue around the bite to die. The skin usually turns dark and an ulcer may develop in the skin. Bites that cause the skin to die in an area need to be followed up closely. In some cases, when large areas of skin are lost, skin grafts may be needed to repair the wound. A skin graft is healthy skin taken from one part of your body and attached to the wounded area after it has healed.

## **How can I help prevent spider bites or scorpion stings?**

To avoid getting bitten or stung by a poisonous spider or scorpion:

- Use traps indoors. Traps are usually sticky surfaces that trap the spiders or scorpions. They are the safest and most effective way to control spiders or scorpions inside your home. If you have a serious infestation, you should seek the advice of a pest control service to learn if there is a safe yet effective pesticide that will kill the spiders or scorpions.
- Wear gloves, long pants, heavy clothing, and socks stretched over your pants when you are around wood piles, rock piles, or dark corners of outdoor buildings.
- Spray insecticides in any area where black widow or brown recluse spiders are seen.
- Wear gloves when you are gardening or working in the basement or attic.
- Inspect and shake outdoor clothing and shoes before putting them on.
- Check your shoes before you put them on.
- Pull back and check the bed linens before going to bed.
- Inspect outdoor toilets carefully before using them. Avoid sitting on outdoor toilet seats.
- Don't go barefoot or wear open sandals around areas where scorpions may be.
- Discourage children from playing near spider and scorpion-infested areas.

Young children and the elderly are the most likely to get sick from spider bites and scorpion stings. You may need to help them take the precautions against bites and stings.

Developed by RelayHealth.

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