

## Spider Bites

Almost all spiders are poisonous. Fortunately, the fangs of most species are too short or too fragile to penetrate human skin. Although at least 60 species in the United States have been implicated in biting people, serious injury occurs mainly from only two types of spiders: the black widow and the brown recluse (fiddleback, or violin) spiders. Although tarantulas are considered dangerous, their bites do not seriously harm people. Spider bites cause fewer than three deaths a year in the United States, usually in children.



A black widow spider is typically one-half to one inch long. The female, which is more common, has a reddish hourglass marking (not seen) on the abdomen.



The body of an adult brown recluse spider may be up to one-half inch long; adults may have a

characteristic fiddle marking (not seen).

## Symptoms

The bite of a **black widow spider** usually causes a sharp pain, somewhat like a pinprick, followed by a dull, sometimes numbing, pain in the area around the bite. Cramping pain and muscle stiffness, which may be severe, develop in the abdomen or the shoulders, back, and chest. Other symptoms may include nausea, vomiting, sweating, restlessness, anxiety, headache, drooping and swelling of the eyelids, skin rash and itching, severe breathing problems, increased saliva production, and weakness.

The bite of a **brown recluse spider** may cause little or no immediate pain, but some pain develops in the area around the bite within about an hour. Pain may be severe and may affect the entire injured area, which may become red and bruised and may itch. The rest of the body may itch as well. A blister forms, surrounded by a bruised area or by a more distinct red area that resembles a bull's-eye. Then the blister enlarges, fills with blood, and ruptures, forming an open sore (ulcer) that may leave a large craterlike scar. Nausea and vomiting, aches, fatigue, chills, sweats, blood disorders, and kidney failure may develop, but the bite is rarely fatal.



The bite of the brown recluse spider is characterized by a purple center surrounded by a target-like red zone.

## Diagnosis and Treatment

There is no way to identify a particular spider on the basis of its bite mark. Therefore, a specific diagnosis can be made only if the spider can be observed. Black widow spiders are recognized by a red or orange hourglass-shaped marking on the abdomen. Brown recluse spiders have a violin-shaped marking

on their back.

The only first-aid measure of any value for a spider bite is placing an ice cube on the bite to reduce pain. For a black widow spider bite, muscle pain and spasms can be relieved with muscle relaxants and opioid analgesics. Hot baths may relieve mild pain. Antivenom is given for severe poisoning. Hospitalization is usually required for people younger than 16 and older than 60 and for those with high blood pressure or heart disease. For a brown recluse spider bite, antivenom is not yet commercially available. Skin sores are cleaned daily with a povidone-iodine solution and are soaked 3 times a day in sterile salt water (saline); dead tissue is trimmed away as needed.