



Poison HOTLINE

1-800-222-1222

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First Aid for Poisoning

Swallowed Poison:

- Gently wipe out mouth and give a small amount of water.
- Do not make the person vomit.
- Call the Poison Helpline at 1-800-222-1222.

Poison on the Skin:

- Remove contaminated clothing and jewelry.
- Rinse skin with lukewarm water for 10 minutes.
- Call the Poison Helpline at 1-800-222-1222.

Poison in the Eye:

- Flush the eye with lukewarm water from cup, faucet, or shower for 15 minutes.
- Do not force the eyelid open.
- Call the Poison Helpline at 1-800-222-1222.

Inhaled Poison:

- Get the person to fresh air.
- Open doors and windows.
- Call the Poison Helpline at 1-800-222-1222.

Spider Bites

The brown recluse spider (*Loxosceles reclusa*) is a small and reclusive spider that hides in places like wood piles, cupboards, attics, and basements, typically in the Midwest and southern United States. Their cytotoxic venom contains sphingomyelinase D which triggers an inflammatory cascade leading to vessel thrombosis, tissue ischemia, and necrosis. Bites are initially painless before becoming an intensely painful lesion several hours later. These are often called the “red, white, and blue lesion” due to the central hemorrhagic ulceration surrounded by blanching ischemia and outer erythema. After 3 days the lesion progresses into an eschar before healing by secondary intent, which can take months. Systemic findings develop in the first 3 days and include fever, myalgias, rash, hemolysis, renal failure, and liver injury.

There is no antivenom for brown recluse envenomation and treatment is supportive. Patients with systemic symptoms or expanding necrotic lesions should be admitted to the hospital. Delayed surgical intervention may be necessary after the lesion has healed.

The black widow spider (*Latrodectus mactans*) forms irregular webs close to the ground in places like outhouses, barns, and sheds. Black widow spiders are typically found in the southern and western parts of the United States. In contrast to the brown recluse spider, the black widow spider has a severely painful bite and no local necrosis. Female black widow spiders (often shiny/black in color with a red “hourglass” on the abdomen) are more venomous than the male spider. Envenomation is graded from 1 to 3, with grade 1 being local symptoms only and grade 2 being musculoskeletal pain and diaphoresis migrating to the trunk. Grade 3 is termed “latrodectism” and results from the α -Latrotoxin binding pre-synaptic neurons and causing profound exocytosis of neurotransmitters (NTs) such as NE, DA, acetylcholine, glutamate, and GABA. This massive NT release can lead to hypertensive emergency, respiratory distress, myocardial infarction, acute cardiomyopathy, abdominal pain mimicking acute abdomen, pregnancy loss, and other life-threatening emergencies. Patients can exhibit “facies latrodectismica,” or a grimaced, edematous, and inflamed face.

Although there is an antivenom available for black widow spider bites, it is typically reserved for life-threatening cases and/or those with refractory pain. In most cases, supportive care is the only treatment required. Benzodiazepines and opioids are preferred as they tend to relieve many of the mild-moderate symptoms.



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