
Rattlesnake Bites – Prevention & First Aid

Most rattlesnake bites contain hemotoxic elements which damage tissue and affect the circulatory system by destroying blood cells, skin tissues and causing internal hemorrhaging. Rattlesnake venom also contains neurotoxic components which immobilize the nervous system, affecting the victim's breathing, sometimes stopping it. Most rattlesnakes have venom composed primarily of hemotoxic properties. Baby rattlesnakes and the Mojave rattler are the exception; they have venom which contains more neurotoxic properties than hemotoxic which makes them very dangerous. (Brown. [1997] *A Field Guide To Snakes of California*.)

PREVENTION-AVOID SNAKES and SNAKEBITE

-To reduce your risk of snakebite, **avoid touching any snake**. Instead, back away slowly. Most snakes avoid people if possible and bite only when threatened or surprised. **Leave snakes alone**. Many people are bitten because they try to kill a snake or get too close to it.

- **Be cautious and alert** when at the range. Be especially watchful for pets and children. **Watch where you step and where you place your hands**. Avoid brush, logs, rocks, k-rails, and structures whenever possible.

- **Wear thick heavy leather footwear**. High tops are recommended. Long loose-fitting pants are also recommended.

TREATMENT- IF YOU ARE BITTEN BY A RATTLESNAKE-TREATMENT

-**Get to safety, and away from the snake**. Protect the person and others from further bites.

-**Call 911 immediately**, and get help on the way. (If you call from a landline, your location is displayed to 911. If you call from a cell phone it goes through the CHP 911 dispatcher in Sacramento and this will take more time.) . Use others to assist you if they are present and able. Responding quickly in this type of emergency is crucial. While waiting for emergency assistance:

-**Keep the person calm**. Acute stress reaction increases blood flow and endangers the person. Panic is infectious and compromises judgment. **Remain yourself calm**. Keep the victim still and calm to lower the heart rate. **It is preferable to carry the victim or bring transport to them during initial treatment. If possible TRANSPORT VICTIM IMMEDIATELY and meet Emergency Medical Persons while in transit to TRAUMA CENTER..** If the victim has to move/walk, calm for 15-20 minutes and then after 15 to 20 minutes, do it slowly enough to keep the heart rate low. This step is to allow the venom to settle in just the bite area. Panic, exertion, or raising the victim's heart rate will pump fresh venom via the circulatory system and to major organs and muscles, which it will then begin to shut down or digest (eat).

- **Do not give the person anything to eat or drink**. This is especially important with consumable alcohol, a known vasodilator which will speed up the absorption of venom. Do not administer stimulants or pain medications, **unless specifically directed to do so by a physician**.

-**Immobilize the bitten arm or leg and keep it lower than the heart**. Stay as quiet as possible to keep the poison from spreading through your body.

-**Remove all rings, watches, and constrictive clothing, in case of swelling**.

-**Cleanse the wound** with soap and water, but **don't flush it with water**, and **cover it** with a clean, dry compress dressing.

-**Apply a splint to reduce movement of the affected area**, but keep it loose enough so as **not to restrict blood flow**.

-**Don't use a tourniquet or apply ice**.

-**Don't cut the wound or attempt to remove the venom through any means**, including sucking the wound.

-**Don't try to capture the snake**, but try to remember its color and shape so you can describe it, which will help in your treatment.

-**Monitor breathing and heart rate**.

-**Note the time of the bite** so that it can be reported to an emergency room physician if needed. If possible, try to remember to draw a circle around the affected area and mark the time of the bite and the initial reaction. If you are able, redraw the circle around the site of injury marking the progression of time. It is helpful to remember what the snake looks like, its size, and the type of snake if you know it, in order to inform the emergency room staff.

- **Transport victim to medical help**, directly to a hospital or meet EMTs at a rendezvous point if possible.

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SIGNS OF RATTLESNAKE BITE -What are the symptoms of venomous bites?

The following are the most common symptoms of venomous snake bites. However, each individual may experience symptoms differently, and some may not have symptoms for a period of time. In addition, different snakes have different types of venom, so the symptoms may differ. Symptoms may include:

- Bloody wound discharge
- Fang marks in the skin and swelling at the site of the bite, usually one or two marks
- Severe localized pain
- Discoloration, such as redness and bruising
- Enlarged lymph nodes in the area affected
- Diarrhea
- Burning
- Convulsions
- Fainting
- Dizziness
- Weakness
- Blurred vision
- Excessive sweating
- Fever
- Increased thirst
- Loss of muscle coordination
- Nausea and vomiting
- Numbness and tingling, especially in the mouth
- Rapid pulse
- Altered mental state
- Shock
- Paralysis
- Breathing difficulties
- The symptoms of a venomous snake bite may resemble other medical conditions or problems. Always consult your physician for a diagnosis. IF IN DOUBT, SEEK IMMEDIATE MEDICAL ASSISTANCE

REFERENCES

- Mayo Foundation for Medical Education and Research
- Sean Bush, MD Loma Linda Medical Center
- Loma Linda Medical Center - Online Medical Reviewer: Gomez, Wanda, RN, PhD Loma Linda Medical Center Online Medical Reviewer: new Mentor board-certified, academically affiliated clinician
- Last Review Date: 4/24/2013 <http://lomalindahealth.org>
- Tintinalli JE, Kelen GD, Stapczynski JS, Ma OJ, Cline DM. Reptile bites. In: Tintinalli JE, Kelen GD, Stapczynski JS, Ma OJ, Cline DM, eds. Emergency Medicine: A Comprehensive Study Guide. 6th ed. New York, NY: McGraw-Hill; 2004:chap 195.
- Varnada Karriem-Norwood, MD
- Otten EJ. Venomous animal injuries. In: Marx JA, ed. Rosen's Emergency Medicine: Concepts and Clinical Practice. 7th ed. Philadelphia, Pa: Mosby Elsevier; 2009:chap 59.
- Dr. Paul Auerbach (Emergency Outdoor Medicine Expert)
- (Brown. [1997] A Field Guide To Snakes of California.)
- WebMD

EMERGENCY CONTACT INFORMATION

The California Poison Control System (CPCS) provides immediate, free and expert treatment advice and referral over the telephone in case of exposure to poisonous or toxic substances.

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Pharmacists, physicians, nurses, and poison information providers answer the calls to 1-800-222-1222 24 hours a day, 7 days a week, 365 days a year. Language interpreters are always available.

The RANGE location to give is:

West End Gun Club, Forest Road IN 33.

Then Dial 911 if you are able from your mobile phone, or drive to a payphone at one of the service stations along Sierra.

TRAUMA CENTER INFORMATION

Driving Directions from WEGC

Back to Sierra Ave, turn Left to US 15 South

US 15 South approx 10 miles to US 10 East

US 10 East approx 11 miles to Pepper Ave. (or 5 ½ mi. to Sierra Ave.)

Left / North on Pepper Ave. (or Sierra Ave.) to Plum

Right on Plum to Meridian

Left on Meridian. ER / Trauma Center entrance is on Left.

