



Job Name: _____ Job Site Location: _____

Date: _____ Start Time: _____ Finish Time: _____ Foreman/Supervisor: _____

Topic 150: First Aid for Snakebites

Introduction: Poisonous snakebites are medical emergencies that require immediate attention. Of all the snakes that are native to the United States, about 25 species are venomous (poisonous). They include pit vipers (rattlesnakes, copperheads, and cottonmouths), coral snakes, and a few species of rear-fanged snakes (calubrids). Of the more than 45,000 people bitten by snakes in the United States each year, fewer than 8,000 venomous bites are reported, and less than 15 people die. Most of these deaths are attributed to children, the elderly, and people who are untreated or treated inappropriately.



SNAKE FACTS: Here is some useful information about snakes:

- Rattlesnakes account for 70% of all poisonous bites and almost all of the deaths.
- A venomous snakebite does not always result in poisoning.
- For unknown reasons, venom is not injected in about 25% of pit viper strikes, and about half of coral snake bites.
- Snake venom is a complex mixture containing many protein enzymes that trigger harmful reactions in the human immune system.
- Snake venom can affect every major organ system in the human body.
- The poison from pit vipers damages tissue around the wound producing changes in blood vessels, causing them to leak. If left untreated, these changes can lead to internal bleeding and/or heart, respiratory, and kidney failure.
- Coral snake venom affects the nervous system but causes little tissue damage.



Snakes are very quick and you may not see the hit. If a strike is suspected, look for these signs:

- A poisonous bite can be detected on the basis of fang marks, redness, pain, swelling, and tingling and numbness in the fingers and toes.
- The swelling progresses quickly, affecting the entire arm or leg; the lymph nodes also swell and ache painfully.
- Other symptoms include a rapid, weak heartbeat, fever, chills, general weakness, faintness, sweating, nausea, and vomiting.
- Breathing difficulties may develop and the victim may have a severe headache, blurred vision, drooping eyelids, and a dry mouth.

Anyone bitten by a snake should be kept as still and calm as possible, kept warm, and taken immediately to the nearest emergency medical facility.

- Before treatment, emergency medical personnel need to determine what kind of snake it was, if it was poisonous, and if venom was injected.
- Cutting and sucking on a snake bite is no longer the recommended method of first aid.
- A Sawyer's extractor (a first aid device that suctions venom from the bite) is now being used.
- The bitten limb should be loosely immobilized and positioned below heart level.
- Medical opinions vary regarding methods of restricting circulation or the use of tourniquets for snake bite first aid.
- Antivenom neutralizes the poison's toxic effects and is crucial when treating snake bites. A tetanus shot and antibiotics will also be required.



MORE SNAKE FACTS: Most venomous snakebites are to the hands and arms and the feet and lower legs.

- Given the opportunity, rattlesnakes will retreat; copperheads, cottonmouths, and water moccasins are very aggressive and may chase you.
- Snakes sense your presence by tasting the air with their ultra-sensitive tongues and feeling the vibrations of your approach through the ground.
- Rattlesnakes can strike a distance equal to half their length and must be in the coiled position to do so.
- Large snake populations are supported by plentiful rodent populations. Removal of rats and mice around a job-site help keep snakes away.
- In overgrown locations during initial site clearing, leather snake chaps and sturdy boots should be worn.
- If the presence of snakes is suspected, probe rubbish and scrap piles with a shovel before reaching in with your hands



Conclusion: Always remember that venomous snake bites are serious medical emergencies requiring immediate response. Good preparation is vital if you will be going to any location where snakes may be encountered. Keep a good snakebite kit (that includes good instructions) with your first aid supplies and always watch out and avoid snakes.

Work Site Review

Work-Site Hazards and Safety Suggestions: _____

Personnel Safety Violations: _____

Material Safety Data Sheets Reviewed: _____ (Name of Chemical)

Employee Signatures:

(My signature attests and verifies my understanding of and agreement to comply with, all company safety policies and regulations, and that I have not suffered, experienced, or sustained any recent, job-related injury or illness.)

These guidelines do not supercede local, state, or federal regulations and must not be construed as a substitute for, or legal interpretation of, any OSHA regulations.