

TerranearPMC Safety Share

Week of May 12, 2014 – Snake Bites

I remember reviewing a health and safety plan a number of years ago and reading over the section pertaining to site-specific hazards, where the topic of “snakes” was presented. The exact wording escapes me, but to paraphrase, this section stated that if someone is bit by a snake, if possible, capture the snake so that it can be properly identified for the purpose of determining whether the snake is poisonous. I immediately included a comment while striking out this paragraph, adding some other language and letting the author know that it is never advisable to follow this practice. First off, trying to capture a snake that IS poisonous can result in some very unfortunate consequences – that is, at least two persons are now in jeopardy and, if work is being performed in a remote area, having two persons incapacitated may be too much of a burden for the remaining field staff to provide effective measures – especially if the particular activity has a buddy system that involves only these two persons!

The prestigious Mayo Clinic offers the following in the event that you or a fellow worker gets bit by a snake.

- Remain calm
- Move yourself or victim beyond the striking distance of the snake to avoid a second bite. A snake’s striking distance is approximately ½ the total length of the snake
- Immobilize the bitten arm or leg, and stay as still and quiet as possible to keep the poison from spreading through your body.
- Remove jewelry before you start to swell.
- Position yourself, if possible, so that the bite is at or below the level of your heart.
- Cleanse the wound, but don’t flush it with water, and cover it with a clean, dry 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.
- Don’t drink caffeine or alcohol.
- Don’t try to capture the snake, but try to remember its color and shape so you can describe it, which will help in the treatment.

Call 911 or seek immediate medical attention, especially if the affected area changes color, begins to swell or is painful.

Most North American snakes aren’t poisonous. Some exceptions include the rattlesnake, coral snake, water moccasin and copperhead. Their bites can be life-threatening. Of the poisonous snakes found in North America, all but the coral snake have slit-like eyes and are known as pit vipers. Their heads are triangular, with a depression (pit) midway between the eye and nostril on either side of the head. Other characteristics are unique to certain poisonous snakes:

- **Rattlesnakes** rattle by shaking the rings at the end of their tails.
- **Water moccasins'** mouths have a white, cottony lining.
- **Coral snakes** have red, yellow and black rings along the length of their bodies.



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To reduce your risk of snakebite, avoid touching any snake. Most snakes avoid people if possible and bite only when threatened or surprised. If you see or hear a venomous snake, freeze. They do not see well, and use motion to determine threat. Back away slowly, alerting others to the snake's presence.

While most snakes are not poisonous, the venomous ones (presented above) are among the most dangerous animals in the world. Every year at least five Americans are killed by a snake bite, and about 8,000 are injured. If you have been bitten by a venomous snake, you will likely know it immediately (another reason why trying to capture one for identification/verification is not necessary). Here are a few signs/symptoms that should serve as indication that you should immediately receive emergency medical attention:

- Blurred vision
- Weakness, dizziness or fainting
- Blood discharge from the bitten area
- Marks and swelling where the snake bit
- Severe pain at the site of the bite
- Diarrhea
- Convulsions of varying severity

Although most snakes will avoid contact with humans and prefer to escape rather than attack, it is advisable to understand to know how to prevent snake bites when you are out in nature or even around your own property. Many snakes are not venomous, but being bitten by any animal can cause infection and is something you won't want to risk. Here are a few useful practices to help reduce the risk of snake bites:

- Learn which snakes may be native to the area you are visiting and familiarize yourself with their habits before you head out hiking or camping.
- Avoid areas where there is tall grass and brush. Try to stay on trails or clear areas where you can see where you step. If you must go into tall grass or brush, use a long stick to probe the area before stepping into it.
- Resist sticking a hand or foot into a crevasse or hole. Snakes often curl up in dark places like holes in fallen timber or in hidden spots among boulders. Avoid snake bites by looking carefully wherever you step or place your hand. This is especially true when rock climbing or exploring in caves.
- Realize that snakes can climb trees. Be careful while walking under low hanging branches, or when climbing up a tree as you could easily mistake a snake for a branch.
- During field work activities in the wilderness, wear heavy boots that extend above the ankle as well as long pants.
- Make camp in areas where snakes are less likely to be. Don't camp near large logs, rocky areas or tall grass. Snakes are usually nocturnal so you will want to be especially careful at night. Zip your tent up tightly and keep your boots or shoes inside with you. Sleep on a cot when possible. Use a flashlight to check inside shoes and the floor of the tent before you venture out at night to use the latrine or portable toilet.

Too bad all the people who know how to run the country are busy driving taxi cabs and cutting hair- George Burns