

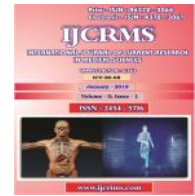


International Journal of Current Research in Medical Sciences

ISSN: 2454-5716

P-ISJN: A4372-3064, E-ISJN: A4372-3061

www.ijcrims.com



Review Article

Volume 5, Issue 2 -2019

DOI: <http://dx.doi.org/10.22192/ijcrms.2019.05.02.003>

‘Snake Bites Problem in over the world’

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Abstract

A **snake bite** is an injury caused by the bite of a snake, especially a venomous snake. A common symptom of a bite from a venomous snake is the presence of two puncture wounds from the animal's fangs. Sometimes venom injection from the bite may occur. This may result in redness, swelling, and severe pain at the area, which may take up to an hour to appear. Vomiting, blurred vision, tingling of the limbs, and sweating may result. Most bites are on the hands or arms. Fear following a bite is common with symptoms of a racing heart and feeling faint. The venom may cause bleeding, kidney failure, a severe allergic reaction, tissue death around the bite, or breathing problems. Bites may result in the loss of a limb or other chronic problems. The outcome depends on the type of snake, the area of the body bitten, the amount of venom injected, and the general health of the person bitten. Problems are often more severe in children than adults, due to their smaller size. Snakes bite both as a method of hunting and as a means of protection. Risk factors for bites include working outside with one's hands such as in farming, forestry, and construction. Snakes commonly involved in poisonings include elapids (such as kraits, cobras and mambas), vipers, and sea snakes. The majority of snake species do not have venom and kill their prey by squeezing them. Venomous snakes can be found on every continent except Antarctica. Determining the type of snake that caused a bite is often not possible. The World Health Organization says snakebites are a "neglected public health issue in many tropical and subtropical countries". Prevention of snake bites can involve wearing protective footwear, avoiding areas where snakes live, and not handling snakes. Treatment partly depends on the type of snake. Washing the wound with soap and water and holding the limb still is recommended. Trying to suck out the venom, cutting the wound with a knife, or using a tourniquet is not recommended. Anti venom is effective at preventing death from bites; however, anti venoms frequently have side effects. The type of anti venom needed depends on the type of snake involved. When the type of snake is unknown, anti venom is often given based on the types known to be in the area. In some areas of the world getting the right type of anti venom is difficult and this partly contributes to why they sometimes do not work.¹ An additional issue is the cost of these medications. Anti venom has little effect on the area around the bite itself. Supporting the person's breathing is sometimes also required. The number of venomous snakebites that occur each year may be as high as five million. They result in about 2.5 million poisonings and 20,000 to 125,000 deaths. The frequency and severity of bites vary greatly among different parts of the world.¹ They occur most commonly in Africa, Asia, and Latin America, with rural areas more greatly affected. Deaths are relatively rare in Australia, Europe, and North America. For example, in the United States, about seven to eight thousand people per year are bitten by venomous snakes (about one in 40 thousand people) and about five people die (about one death per 65 million people).

Keywords: Snake Bites, Rattlesnakes, Water moccasins,

Introduction

What are snake bites?

About 7,000 venomous snake bite cases are reported every year in the United States. A bite from a venomous snake is rarely deadly — about 6 fatalities are reported every year — but it should always be treated as a medical emergency. Even a bite from a harmless snake can be serious, leading to an allergic reaction or an infection. Venomous snake bites can produce an array of symptoms, including localized pain and swelling, convulsions, nausea, and even paralysis.

First aid steps you can take after a snake bite occurs include cleaning the wound, remaining calm, and immobilizing the affected area. However, it's essential to get to a medical facility immediately for emergency treatment. If treated in time, the outlook for recovery is good.

Identifying venomous snakes- Unfamiliar with the different types of snakes and unable to distinguish between venomous and non-venomous ones, it can be difficult to know how to respond in the event of a bite. **Always treat a snake bite as if it's venomous.** While most snakes in the U.S. are not venomous, several types do contain venom. In the U.S., all of the venomous snakes, except for the coral snake, are pit vipers. Pit vipers are distinguishable by a noticeable depression between the eye and nostril. This pit is the heat-sensing area for the snake. While all pit vipers have a triangular head, not all snakes with a triangular head are venomous.

- If you or someone you are with has been bitten by a snake, you will know immediately. It's possible, though, for the bite to happen quickly and for the snake to disappear. To identify a snake bite, consider the following general symptoms: two puncture wounds

- swelling and redness around the wounds
- pain at the bite site
- difficulty breathing
- vomiting and nausea
- blurred vision

- sweating and salivating
- numbness in the face and limbs

Some venomous snakes also cause symptoms specific to their type. **Rattle snakes** are easily identifiable. They have rings at the end of their tails that shake when they feel threatened. This makes a rattling sound and is a warning for you to back away. Rattlesnakes are the largest of the venomous snakes and account for many of the venomous bites in the U.S. each year. These snakes can be found in nearly any habitat across the country. They like open areas where they can rest in the sun such as rocks, and logs. Symptoms

Symptoms specific to rattlesnake bites are immediate and include:

- severe pain
- drooping eyelids
- low blood pressure
- thirst
- tiredness or muscle weakness

Copperheads:- Copperheads are reddish or gold in color with hourglass-shaped bands. This snake is typically 18 to 36 inches in length. Copperheads are mostly found in forests, swamps, rocky areas, and rivers in the eastern states (as far as Texas). They are not aggressive. Most copperhead bites occur if you accidentally step on or near one.

Symptoms

Copperhead snake bites share symptoms with water moccasin snake bites. Symptoms can include:

- immediate pain and symptoms
- change in skin color
- shock
- low blood pressure
- weakness

Coral snakes- Coral snakes have black, yellow, and red banding and are often confused with non-venomous king snakes. You can distinguish a

coral snake by the fact that the red bands touch the yellow bands. They live in the woods, marshes, and sandy areas of the South. Coral snakes typically hide underground and in leaf piles.

Symptoms

Symptoms specific to coral snake bites include:

- pain that is not immediate
- symptoms that set in hours after the bite
- convulsions
- drooping eyelids
- change in skin color
- stomach pain
- difficulty swallowing
- headache
- shock
- paralysis

First aid for snake bites

Should you be bitten by a snake, it's essential to get emergency treatment as quickly as possible. However, there are some tips that you should also keep in mind:

- Call 911 immediately.
- Note the time of the bite.
- Keep calm and still as movement can cause the venom to travel more quickly through the body.
- Remove constricting clothing or jewelry because the area surrounding the bite will likely swell.
- Don't allow the victim to walk. Carry or transport them by vehicle.
- Do not kill or handle the snake. Take a picture if you can but don't waste time hunting it down.

First aid myths

There are also several outdated first aid techniques that are now believed to be unhelpful or even harmful:

- Do not use a tourniquet.
- Do not cut into the snake bite.

- Do not use a cold compress on the bite.
- Do not give the person any medications unless directed by a doctor.
- Do not raise the area of the bite above the victim's heart.
- Do not attempt to suck the venom out by mouth.
- Do not use a pump suction device. These devices were formerly recommended for pumping out snake venom, but it's now believed that they are more likely to do harm than good.

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Treatment for snake bites

The most important thing to do for a snake bite is to get emergency medical help as soon as possible. A doctor will evaluate the victim to decide on a specific course of treatment. In some cases, a bite from a venomous snake is not life-threatening. The severity depends on the location of the bite and the age and health of the victim. If the bite is not serious, the doctor may simply clean the wound and give the victim a tetanus vaccine.

If the situation *is* life threatening, the doctor may administer antivenom. This is a substance created with snake venom to counter the snake bite symptoms. It's injected into the victim. The sooner the antivenom is used, the more effective it will be.

Outlook for a snake bite

The outlook for a person with a snake bite is highly variable. For a non-venomous snake bite, the outlook is excellent if the wound is cleaned and treated promptly. For a venomous bite, the outlook is good if the victim receives emergency care very soon after the bite has occurred. Healthy adults with shallow bites have a better outlook

than children and those with weakened immune systems who have received deep bites.

Prevention of snake bites

Snake bites can be prevented in many cases. It's best to refrain from approaching or handling snakes in the wild. Avoid typical places where snakes like to hide, such as patches of tall grass and piled leaves, and rock and woodpiles. If you encounter a snake, give it space to retreat and let it take cover. It's in the snake's nature to avoid interaction.

When working outside where snakes may be present, wear tall boots, long pants, and leather gloves. Avoid working outside during the night and in warmer weather, which is when snakes are most active.

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How to cite this article:

Ashikujaman Syed. (2019). 'Snake Bites Problem in over the world'. Int. J. Curr. Res. Med. Sci. 5(2): 16-19
DOI: <http://dx.doi.org/10.22192/ijcrms.2019.05.02.003>