Information Sheet: Snakes Alive!

There are over 120 species of snakes in the U.S. Most are harmless to people; all are important members of the food chain, helping to control populations of rodent pests. Some species are poisonous, able to inject venom through hollow, needle-like teeth into bite victims.

The Blue Ridge Poison Center receives an average of 80 calls each year about poisonous snakebites in our region. Nationwide, experts estimate there are about 3,000 venomous snakebites annually, although most believe that many more cases go unreported. Yet death from a venomous snakebite in the U.S. is very rare, occurring in only a few cases each year.

How do you know if a snake is poisonous?

Virginia is home to three poisonous species:
- The Timber Rattlesnake (found in mountainous regions);
- The Cottonmouth or Water Moccasin (found only in the Tidewater area);
- The Copperhead (common statewide and the source of most bites).

Pictures and habitat maps are on the next page. The Virginia Department of Game and Inland Fisheries also has helpful photos: www.dgif.virginia.gov.

Note: Virginia’s poisonous snakes have:

- Elliptical pupils (like a cat’s eyes in bright light) instead of round ones.
- Triangular, spade-shaped heads instead of narrow, oval-shaped heads.

Experts warn: Colors and patterns can differ depending on the snake’s age, health, when it last shed its skin, and variations in nature. Head shape can be tricky to distinguish, especially in baby snakes. When in doubt, assume the snake is poisonous.

What happens when a poisonous snake bites you?

Virginia’s poisonous snakes all have venom that destroys blood cells, blood vessels, and other tissues. If you are bitten by one of Virginia’s poisonous snakes, you may experience some of these symptoms:

- Intense pain spreading out from the bite
- Puncture wounds from fangs
- Progressive swelling and bruising (may become severe)
- Sweating
- Weakness
- Nausea and vomiting
- A drop in blood pressure
- Muscle twitching
- Metallic taste in the mouth
Poisonous Snakes in Virginia and their Habitats

NOTE: The VA Dept. of Game and Inland Fisheries states that a fourth snake, the Canebrake Rattlesnake, inhabits the extreme Southeastern part of Virginia, and is an endangered species. Experts disagree whether the Canebrake is a separate species or a sub-species of the Timber Rattlesnake.

Photo Credits: Timber Rattlesnake and Copperhead: Dr. Edward J. Wozniak, D.V.M., PhD. Cottonmouth: John Willson, Savannah River Ecology Laboratory (SREL). All photos are courtesy of the Centers for Disease Control and Prevention, and can be found on their website: www.cdc.gov.

Map Credits: All maps are courtesy of the Virginia Department of Game and Inland Fisheries, and can be found on their website: www.dgif.virginia.gov.
**SNAKE BITE: What To Do**

- **Remember:** Death from snake bites in Virginia is **extremely rare**. Stay calm!
- **The most important goal is to get the victim to a health care facility,** where they can have access to medical care and antivenom if needed.
- If possible, wash the bite with soap and water and immobilize the bitten body part.
- Swelling is likely, so remove constrictive items like jewelry or tight clothing near the bite.
- Call the Blue Ridge Poison Center for advice and support:
  1-800-222-1222. (Cell users: 1-800-451-1428)

**DID YOU KNOW?** About 20% of the time, a snake does not inject any venom into its bite victim. But if you suspect the snake was poisonous, seek immediate medical care even if there are no symptoms, because occasionally symptoms can be delayed by several hours.

**SNAKE BITE: What NOT to do**

There are many myths and folk remedies for treating snake bites. Don’t believe everything you see in the movies! The following actions have **not been shown to improve a victim’s outcome and in fact may cause more harm:**

- Do not use any form of suction.
- Do not give the victim an electric shock.
- Do not give the victim any drugs or alcohol.
- Do not apply a tourniquet.
- Do not apply ice or use an ice bath.
- Do not cut the wound.

**How to Avoid Snakebites**

Snakes do not want to bite you; they would prefer to be left alone, or to get away from harm. However, they will bite to defend themselves if they feel threatened. This can happen accidentally, when you do not see the snake and therefore get too close.

Most bites happen between April and October, when snakes are active.

Be alert in places where snakes may live, including tall grass or brush, rocky areas, fallen logs, bluffs, swamps, marshes, and deep holes in the ground.

When outdoors, watch where you put your hands, feet, or sit down.

In snake habitats, wear long pants and shoes if possible.

Shine a flashlight on your path when walking outside at night.

If you encounter a snake, just go around it staying at least 6 feet away.

Never handle a snake, even if you think it is dead. Recently killed snakes may still “bite” by reflex.

Most importantly, if someone has been bitten, **DO NOT** try to catch or kill the snake! This often results in another snakebite victim. Identifying the snake is helpful but not necessary for proper treatment. Trying to hunt down the snake only puts you at risk and wastes valuable time getting the victim to a health care facility.

For more information on poison prevention and poison safety, please contact: Educator, Blue Ridge Poison Center, UVA Health System Box 800-774 Charlottesville, VA 22908 1-434-982-4386 or visit www.healthsystem.virginia.edu/brpc/