

SNAKE SAFETY
BY: Melissa Jeremiah, RN
Director of Hoosier Uplands Home Health and Hospice

With the weather warming up more people will be engaged in outdoor activities. My Dad, who loves to get out in his yard and go into the woods behind his house, recently saw an adult copperhead snake, with a nest of smaller copperheads. This prompted me to research the snake population of Southern Indiana.

There are 3 venomous snakes, which call Southern Indiana home and all are pit vipers. Pit viper have a sensory pit between their eye and nostril which help them locate warm-blooded prey, even in the dark. If a snake appears to have four nostrils, it's a pit viper. The information in this article on snake identification is only good in Indiana. Venomous snakes in Indiana have pupils that are vertical slits and are heavy-bodied. They have broad, spade-shaped heads that are distinctly wider than their narrow necks. The head of a non-venomous snake is typically the same width as its body. Some non-venomous water snakes are stout and many snakes flatten their heads when bluffing, making the head look spade-shaped.

The Northern Copperhead is the most common poisonous snake in Indiana, and even it has a restricted range in the hills of Southern Indiana. They live in high, dry, rocky areas and well forested areas dominated by oaks and hickories, but have been seen in outbuildings and barns. It has a coppery-red head and an hourglass pattern of 15 - 19 mahogany bands on its body. Irregular brown spots are often found between the bands and it is 24 - 36 inches long. It's bands may be confused with a water snake. Copperheads bands are narrow along the back and wide on either side, where water snake bands are saddle like, which means wide on the back and narrow on the side. Copperheads are nocturnal, which means they hunt at night, and they are more likely to bite during the evening hours. This snake is very secretive and does not tolerate human presence. The bite of this snake is extremely painful, but rarely life threatening.

The Cottonmouth Water Moccasin is restricted to a single wetland in Dubois County. The cottonmouth is recognized by the distinctive white lining that it displays when annoyed. The color patterns are easily confused with those of the northern or midland water snake, and is 30 - 42 inches long. They are almost never seen, even by those who know exactly where they should be. Water snakes seen while fishing around the state are simply common water snakes.

Timber Rattlesnakes are also rare, restricted to some of the forested hills in south-central Indiana. This snake lives on dry, forested hillsides and hibernates in dens. Colors and patterns vary from almost black to yellow with dark blotches, it can be up to 5 feet or more long. It has a distinctive head shape and rattle at the end of the tail. A new rattle segment is added when the snake sheds its skin 1 - 2 times a year. This snake is not aggressive and the majority of documented bites occurred while people were trying to pick up the snake.

The fourth venomous snake is the Eastern Massasauga Rattlesnake, which lives in

Northern Indiana, in marshy, swampy areas and bogs. It is on occasion found in woodlands and old fields. It is spotted with dark black or brown blotches on the back and 3 rows of small, dark spots on either side, and is generally 20 - 25 inches long. It is generally mild mannered and rarely strikes unless stepped on or picked up.

The remaining snakes who make their home in Southern Indiana are non-venomous, and include the eastern garter snake, north and east ribbon snake, northern ring-necked snake, kirtlands water snake, queen snake, northern and midland water snake, midland brown snake, midwest worm snake, rough and smooth green snake, eastern hognose snake, southern black and blue racer, eastern and red milk snake, black rat snake and black kingsnake, which are all found in Southern Indiana. The other non-venomous snake from Indiana is the fox snake, which lives in the northwest corner of the state.

Snakes tend to be more active in the middle of the day in the spring and fall when evenings are cool, and more active in the morning and evening during summer months. A snakes body temperature is the same as its surroundings. Snakes regulate their body temperature by basking in the sun when cold, or seeking shade and reducing activity when warm.

Venomous snake bites in Indiana are very rare. Most bites occur when people are trying to kill or handle the snake. Never get closer than the length of a snake. Never attempt to handle a snake that is or may be venomous. To avoid being bitten move away from the snake, as snakes do not actively seek out people and bite them. If given the opportunity snakes will almost always try to escape an encounter. Snakes will always flee rather than striking, unless they are harassed or startled. When hiking or fishing you should look closely before stepping, to avoid stepping on a snake. Be alert and search the area ahead of you, do not merely look down at your feet. Be wary of areas containing logs or rocks. Remember that many venomous snakes blend in with their surroundings and may be difficult to see unless you are alert. If you know you will be in an area known to have venomous snakes, wear high-topped, leather hiking boots. Do not reach under rocks or logs, and do not step over logs, step on them, then over. You should also be very careful when handling a dead snake and avoid its head. A snake's bite reflex remains active up to an hour or more after it's death, meaning a dead snake can bite.

The bite of a venomous Indiana snake is dangerous, but rarely fatal. More people die from bee stings and lightening strikes annually. If you are bitten you should remain calm and avoid excessive activity, as most snakes are not poisonous. If possible note the snakes markings, color, behavior and habitat, but do not waste time or risk being bitten again by capturing or killing the snake. If you think the snake was venomous, or if you are unsure, have a friend call 911. Do not make any incisions at the bite. Walk, don't run, when moving, and keep the bitten part of the body lower than your heart. If the snake is non-venomous clean the bite area thoroughly with soap and water as soon as possible, to avoid infection.

Information for this article was obtained from the Indiana DNR at www.in.gov/dnr and The Center for Reptile and Amphibian Conservation and Management at <http://herpcenter.ipfw.edu>.