

# Venomous Snake Safety

September 2021

Venomous Snakes Safety Louisiana is indigenous to 54 different species of snakes. Of the 54 species, only seven snakes are venomous: the copperhead, water moccasin (cottonmouth), pygmy rattle snake, canebrake rattlesnake, \*eastern diamondback rattle snake (the largest venomous snake in the U.S.), Texas coral snake and the harlequin coral snake.

Snakes are not aggressive except when defending themselves or when attempting to capture prey. In fact, snakes have been known to slither toward someone they do not immediately perceive as a threat.

There are many myths regarding snakes, one of which is striking their prey from great distances. This is not true. Venomous, and nonvenomous, snakes are unable to strike from a distance greater than their body length, even less a distance for large rattlesnakes. Only five to six feet is generally considered a safe distance when approaching venomous snakes.

Pit vipers, which include water moccasins, rattle snakes and copperheads, store their venom in two glands (pits), which are located on both sides of their head, just behind their eyes. Muscles attached to the glands, squeeze and eject the venom through two ducts, which passes the venom through their hollow fangs. A venomous snake bite leaves a distinctive pattern of either one or two fang punctures.

For adult snakes, ejecting venom is an intended action. A bite that results in no venom being ejected is commonly referred to as a dry bite, which occurs in approximately one out of every five human snake bites. Dry bites are sometimes referred to as a superficial or panic bite.

Another distinguishable characteristic of pit vipers is their oblong eye shape with peaked ends, like that of cats. Nonvenomous snakes, excluding the coral snake, have round eyes.

Coral snakes, which unlike pit viper, have round eyes and possess the most powerful venom of any snake in North America. Worldwide, only the black mamba has venom that is stronger; however, unlike pit vipers, coral snakes do not have fangs that are capable of effectively delivering venom into their prey or victim. Coral snakes must literally chew on their victim to inject their venom. It is for this reason that bites from coral snakes rarely results in death.

Snakes, like all reptiles, do not hibernate. Their state is referred to as brumation, which is simply a condition where reptiles, and other cold-blooded species, slow down their body's metabolism to an extreme level. Snakes have been known to seek warmth inside homes, businesses, near outside water heaters and outside dryers during the winter months. As temperatures warm, even during the winter months, snakes can become more active.



As winter transitions to spring and as the weather warms, snakes emerge from their burrows; therefore, for persons who work outside, venomous snake identification and characteristics should become an integral part of an organization's emergency preparedness plan.

### Venomous Snake Characteristics:

**Copperhead:** Beige, tan, or pale gray, often with a dull pink or orange tint above, with broad, darker brown, hourglass-shaped crossbands that slightly paler on the lower sides; underside whitish with dark brown blotches; scales keeled and in 23-27 rows, 14-45 inches in length. The head does not have any patterns, often with a faint orange tint on the top, dull yellow on the sides. Juvenile copperheads have bright yellow tails.

**Water Moccasin:** Dark tan, brown or nearly black, with vague black or dark brown crossbands; side of head black with a white line from the eye to the angle of the mouth; underside dark with large blackish blotches; scales keeled and in 25 rows, 15-55 inches in length. Juveniles have a bold pattern of dark brown crossbands on a pink or orange background, with a yellow tail. Some adults retain the juvenile pattern throughout their life. Water moccasins are the only venomous snakes found in all 64 parishes.

**Pygmy Rattlesnake:** Pale gray or tan above, with a row of dark blotches or spots down the back and one row on each side; reddish or orange band present down the middle of the back, and wide black band along the side of the head; underside whitish, gray or tan with brown blotches or spots; scales keeled and in 21-23 rows, 10-20 inches in length. The rattle is very small in contrast to those of the other rattlesnake species.

**Canebrake Rattlesnake:** are light tan or beige with dark brown crossbands and a reddish stripe down the middle of the back; are 25 to 70 inches in length and have a brown band from their eyes to the angle of their mouth. Their tails tend to be dark gray or black and have a ridge down the center of their scales.

**Eastern Diamondback Rattle Snake:** which are 25 to 90 inches in length, are brown or tan above with dark brown, pale-edged, diamond-shaped markings; dark band bordered by light stripes extends diagonally through eyes; tail with pale and dark rings; scales keeled and in 29 rows.

**Texas Coral Snake:** have a series of wide black and red rings, separated by narrow yellow rings, encircling the body; snout black and rear of head yellow; scales smooth and in 15 rows, 15-36 inches in length. The first black ring on the neck covers the rear tips of the parietal shields (two large shields on the crown of the head).

**Harlequin Coral Snake:** have a series of wide red and black rings, which are separated by smaller yellow rings and are 15 to 36 inches in length. The snout is black with a yellow ring at the back of the head.

To assist your employees in identifying venomous snakes, visit the Louisiana Department of Wildlife & Fisheries website at [www.wlf.louisiana.gov/resource/snakes-louisiana](http://www.wlf.louisiana.gov/resource/snakes-louisiana)



\*NOTE: the last verified siting of an eastern diamond back rattlesnake in Louisiana was in 1995 in Washington Parish.

