When people sometimes see snakes in or around their homes, they usually worry about whether the snakes are dangerous. Knowledge about snakes will help you understand how to handle situations when snakes are encountered.

For your safety in managing snake problems around your home, it is important to be able to identify snakes as venomous (poisonous) or nonvenomous (nonpoisonous) types. Buy and use a good field guide to reptiles to help identify snakes and understand their habits. You may also consult Extension Information Sheet 641, Snakes Alive! How To Identify Snakes, to learn more about them.

In most cases, the snakes around houses are harmless, such as garter, ribbon, ringneck, king, or rat snakes. But Mississippi does have six types of venomous snakes: copperhead, cottonmouth or water moccasin, coral snake, canebrake or timber rattlesnake, pygmy rattlesnake, and eastern diamondback rattlesnake.

### Distribution of Venomous Snakes in Mississippi

- **Cottonmouth** - throughout the state
- **Copperhead** - throughout the state
- **Pygmy Rattlesnake** - throughout the state
- **Timber Rattlesnake** - throughout the state
- **Eastern Coral Snake**
- **Eastern Diamondback**
Venomous Snakes

**Copperhead.** The copperhead has pit viper characteristics and bands or hourglass markings of brown, copper, or red on a tan body. These 20- to 36-inch snakes (the record is 56 inches) have regional differences in color and size; the young have a bright-yellow tail tip. As with many (but not all) poisonous snakes, its head has a flat, triangular shape, and its pupils are vertical (cat-like).

**Cottonmouth.** The semiaquatic western cottonmouth, or water moccasin, also has pit viper characteristics. The adult has a banded or blotched upper body that is olive brown or black, with a lighter underside. Although often hard to tell from the nonvenomous water snake, a cottonmouth often appears more aggressive. Water snakes may or may not leave quickly when threatened, but cottonmouth often raises its head and appears more aggressive by confronting an enemy with a show of fangs inside a cotton-white mouth. The size of the cottonmouth ranges from 30 to 48 inches, with a record length of 74 inches.

**Coral Snake.** The coral snake is an exception to the other venomous snakes of the United States because it has round pupils and an oval head. This reclusive snake is characterized by brightly colored bands of red, yellow, and black circling the body. The nonvenomous milk snake mimics the coral snake but has red stripes bordered by black (“red on black, my friend Jack”) rather than red stripes bordered by yellow (“red on yellow kills a fellow”). Because of its small mouth, the coral snake has trouble grasping and biting a much-larger human. If it does manage to bite, the effect from a coral snake can be more deadly than from a pit viper.

**Rattlesnake.** The most distinguishing characteristic of rattlesnakes is, of course, rattles. Rattlesnakes typically add a rattle every time they shed their skin (two to four times per year). Many rattlesnake varieties have a triangular-shaped head and have vertical pupils. The size range of rattlesnakes is 15 to 72 inches, with a 96-inch eastern diamondback holding the record.

If you store firewood for a fireplace or woodstove, keep the stack away from the house. You can store wood for awhile near the house in cold months when snakes are inactive. Use a rack to keep the firewood at least 12 inches above the ground. Snakes are discouraged if the wood (shelter) is separated from the soil. Any structure or vegetation that provides a home for small rodents (mice and rats) also provides a home for the snakes that prey on them. Put food resources for rodents, like pet food, in secure closed containers to discourage rodents and the snakes that feed on them.

Exclusion

Check around the base of storage sheds. If snakes can crawl under them for protective cover, close off access with packed soil or building materials such as bricks, sheetmetal, or small mesh metal hardware cloth. To keep out snakes effectively, use a barrier that extends about 6 inches below the soil surface. Snakes may push through loose soil, but they cannot dig through hard soil because they don’t have legs or claws. Snakes may use holes made by mice or other rodents, and snakes may eat these and other small mammals as food, so control these rodents as best you can.

Check around the foundation of your home for cracks or openings where snakes, mice, or other unwanted guests might enter. Close all openings larger than a quarter of an inch, and use latex caulk or insulating foam around any gaps where surface wires or pipes enter. Seal cracks in masonry foundations (poured concrete, concrete blocks, or bricks) with mortar. Repair holes in wooden buildings with sheet metal or fine mesh metal hardware cloth.

For rural homes, be sure snakes cannot get in septic or treatment plant drain pipes. If the pipe or tile is open at the end, cover it with 1/4-inch metal mesh hardware cloth. Check now and then to be sure the wire doesn’t interfere with drainage.

Chemical Controls

No fumigants or toxicants are federally registered for snake control. Diet, body temperature, and other biological aspects of snakes complicate the potential for developing such snake controls.

Repellents

Repellents are questionable at best for effectiveness at keeping snakes away from homes. No repellents are currently registered for snake control.

Various home remedies have been suggested for repelling snakes, and several have been tested to determine if they repel black rat snakes. Treatments included moth balls, sulfur, gourd vines, a tacky bird repellent, lime, cayenne pepper spray, sisal rope, coal tar and creosote, artificial skunk scent, and musk from a king snake (eats other snakes). None of these worked.

Some sticky materials, when applied in 18-inch bands around supporting poles, prevented snakes from climbing to wood duck nest boxes. This may keep snakes away from bird nest boxes mounted on poles, but otherwise it is not practical.

Control Snake Problems

**Manage Habitat**

The best way to discourage snakes around a home, such as in the yard or garden, is to make the area unattractive to them. Remove their habitat, including hiding places, foraging areas, and food resources.

In early spring, snakes are attracted to hot spots, such as metal cans or other heat-conducting items. Snakes are most active in warm months, when they like cool, damp, sheltered areas. Remove hiding cover for snakes near homes, including piles of boards or firewood, rock or brick piles, brushy fence rows, and weedy growth. Keeping the lawn mowed around the perimeter of your home minimizes hiding places and paths for snakes to your home. Check around cement walks or porches for cracks or holes that might let snakes in for shelter. Repair or close these places so snakes can’t use them.

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Removal from Inside a Building
Snakes occasionally enter houses. They may be attracted by the warmth on cold days or the coolness on hot days. They may enter through a hole in the foundation or outer house structure, or they may crawl under a door or through a basement window. If this occurs, remove them, then close the access to keep them out.

One good way to remove a snake is to sweep it with a broom into a box that can be sealed, then release the snake as far away from houses as possible. It usually serves very little practical purpose to kill the snake. In fact, many snakes provide great benefit to humans by keeping rodent populations low. (See Beneficial Aspects of Snakes.)

If you cannot find the snake to capture it but think one is in your home, consider using the rumpled cloth or glue trap techniques described in the next section of this publication. Unless you are skilled at snake identification, treat all snakes as if they are venomous and avoid contact with the snake’s head. Do not try to grab a snake by the tail, because the snake can still quickly strike the hand that is holding it.

Trapping
Attract snakes for capture by placing rumpled damp cloths (example: burlap bag) on the floor near a place the snake is likely to be. Cover it with a dry one to slow evaporation. The rumples provide spaces for snakes to enter under the cloth. Snakes like the cloths because the cloths provide a cool, damp, dark place for them to hide. Within a few weeks you may find the snake curled up in the cloth. Remove the snake pile of cloths with a scoop shovel or pitchfork and place in a large box and carry it away.

You can also capture snakes using rodent glue boards. Remove and release captured snakes unharmed by pouring common cooking oil on them. The oil breaks down the glue, then you can remove the snakes with a stick or a pole.

One glue board arrangement will capture snakes up to 5 to 6 feet long. Use a 1/4-inch plywood board about 16 x 24 inches. Tack or glue two to four rodent glue traps (or use bulk glue) along one side. Drill a hole with a 3/4-inch diameter in an opposite corner (see the drawing below). Insert a rope or pole with a hook on the end into the hole to remove the board and snake. You may need to trim the edges of plastic-tray type glue traps to provide a flat surface.

Place the board against an open section of wall where the snake is likely to travel but where it is away from pipes or other objects the snake might use for leverage to escape. Remove and release captured snakes unharmed by pouring common cooking oil on them. The oil breaks down the glue, then you can remove the snakes with a stick or a pole. Use glue boards only indoors or under outdoor structures. Be sure children, pets, or wild animals cannot reach them. Despite the aid of cooking oil, the glue is messy and difficult to remove from animals.

Current trap designs generally are impractical for removing or discouraging snakes outdoors or around homes. A simple field-research method uses boards (example: 1 to 2 feet square) placed on the ground surface. Check under boards periodically for snakes, because they hide under boards for suitable shelter. In backyards, boards may actually improve snakes’ habitat, attracting rather than repelling them.

Beneficial Aspects of Snakes
Generally, snakes are an important part of our natural world. They are beneficial to humans in many ways, as long as we can keep them out of our homes!

Venom from poisonous snakes is used in medical research and has benefitted people in unexpected ways. One example is a successful and widely used blood pressure medicine developed using the chemical pattern of snake venom. Other research is testing snake poisons to treat blood and heart problems and to control harmful bacteria.

Also, many snakes kill and eat rats, mice, insects, moles, and other pests. King, milk, black racer, and eastern indigo snakes commonly eat other snakes, including venomous ones, that are considered pests. Snakes probably won’t eliminate pests, but they can keep numbers to a manageable level, because snakes can capture pests in areas other predators cannot access.

Legal Status
Most snakes in Mississippi are not protected by state or federal law, but all snakes do come under the state’s regulatory authority. No native snake or snake part may be bought or sold or in any way entered into commercial trade. The black pine, eastern indigo, rainbow, and southern hognose snakes are listed as endangered in Mississippi. By federal law, the eastern indigo snake is listed as threatened.

But legal status may change. Check with the Mississippi Department of Wildlife, Fisheries & Parks Museum of Natural Science in Jackson, Mississippi, if you have questions or concerns. Even though most snakes in Mississippi are not legally protected, it is better to leave them alone when they are not causing a problem.