The eastern coral snake (Micrurus fulvius) is one of 6 venomous snakes found in Florida. It is related to cobras, mambas and kraits. Coral snakes are often found in suburban areas crossing driveways or crawling in yards, especially during the spring and cool fall months. They are most often encountered in the late morning and early dusk. Coral snakes are often confused with the harmless scarlet king snake and Florida scarlet snake which share similar color patterns. However the red and yellow bands of the coral snake touch while the red and yellow bands are separated by black bands on the harmless mimics. In addition, the head of the coral snake is black with a yellow ring just behind the eyes. The heads of the mimics are red in color. Although markings are usually typical, some color variations can occur.

Unlike pit vipers (rattlesnakes, copperheads and cottonmouths), coral snakes lack fangs as an effective venom delivery system. Instead, they use a set of grooved teeth in the anterior maxilla. They almost always must bite, hang on tenaciously, and chew to introduce venom into the victim. Because of their shy and reclusive nature, coral snakes rarely bite. Most bites occur from intentionally handling the snake. Often this occurs because the victim has mistaken the snake for one of the harmless mimic snakes.

When in doubt about the identity of a snake, the Florida Poison Information Center can help with determining an appropriate approach to monitoring or treating the snakebite victim.

The Coral snake injects a venom which contains powerful neurotoxins and myotoxins.

Signs and Symptoms

- Minimal local effects - including abrasions or scratches, punctures may be indistinct which may ooze blood
- Pain or parathesia may radiate up the extremity
- Signs of bulbar paralysis:
  - Ptosis (drooping eyelids)
  - Diplopia
  - Dysphagia
  - Dysphonia
  - Fasiculations of the tongue
- Altered mental status
- Weakness
- Signs of impending respiratory failure
- Pharyngeal spasm
- Hypersalivation
- Cyanosis
- Tachycardia
- Hypotension
- Death results from complete respiratory failure

Systemic effects may be delayed for 12-18 hours. Despite treatment, clinical effects may require weeks of supportive care, and weakness may persist for weeks to months. Extensive rehabilitation may be required.

The Florida Poison Information Center-Tampa recommends the following treatment for victim's with eastern coral snake envenomation, however recommendations may change on a case by case basis.

- **Immediately notify the Poison Center for all coral snake envenomations at 1-800-222-1222.**

Treatment Recommendations

1. All patients should be admitted to the ICU for 24 hours of observation due to possible delayed effects.
2. Keep patient NPO to prevent aspiration
3. Establish a large-bore IV site and infuse a maintenance IV solution.
4. Update tetanus immunization if needed
5. Apply cardiac monitor and pulse oximeter. Monitor vital signs and mental status every hour, especially respirations.
6. Administer Coral Snake Antivenin as soon as possible. Monitor vital signs q 15 minutes while administering antivenom.
7. Obtain blood for CK level to monitor for myotoxic damage.
8. Perform baseline and serial peak flow spirometry every 2 hours.
9. Avoid narcotics or sedatives which may mask neurologic effects and suppress respirations.
10. For signs of respiratory distress, hypoxia, altered mental status or seizures, immediately intubate and ventilate aggressively.
11. Antibiotics are generally not indicated.
12. DO NOT ADMINISTER CROFAB.

Antivenin Therapy

In 2001, Wyeth discontinued production of coral snake antivenin. Antivenin remains available, but supplies are decreasing. In order to preserve remaining antivenin, the Florida Poison Information Center-Tampa recommends that health care providers call the Poison center for current recommendations for antivenin therapy, and assistance in locating a supply.