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*General Care*

**EMR/BLS**

1. Initial Assessment/Care [Protocol 1.](#)
2. Attempt to identify the insect, reptile, or animal that caused the injury if it is safe to do so. If unknown or it is a known venomous reptile bite or spider bite, **have the FAO contact the Anti-Venom unit.**
3. Be alert for the development of any anaphylactic reaction and treat according to the Systemic Reaction [Protocol 17.](#)
4. Immobilize the affected area. Keep the patient calm.
5. Remove and secure in a safe location any rings, bracelets, jewelry, etc. that may be in the injured area before swelling becomes too great.
6. Do not apply tourniquets, cold packs, make incisions around the area, or attempt to suction.
7. If unable to contact an Anti-Venom unit, contact the **Poison Control Center, [1-800-222-1222](tel:1-800-222-1222)** for assistance in managing specific envenomation.

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## A. North American Pit Vipers

Includes rattlesnakes, copperheads, and cottonmouths.

### EMR/BLS

1. For any known or suspected bite, refer to Antivenin Bank [Procedure 33](#).



Evaluate for specific signs/symptoms:

- a) Distinct "fang marks" or puncture wounds.
  - b) Swelling and pain at the site.
  - c) Weakness, nausea, and vomiting.
  - d) Paresthesia, fasciculations.
  - e) Numbness and tingling around the face and head.
  - f) Metallic taste, change in taste sensation.
  - g) Hypotension and shock.
  - h) Allergic reactions.
2. Mark the end point of the initial swelling and the time directly on the skin. This should be repeated **every 15 minutes** if applicable. The time of the bite should also be recorded on the Florida EMS Report or the electronic patient care report (ePCR).
  3. If possible, keep the injured area in a neutral or elevated position and splint to minimize movement.

### ALS

5. Establish IV access.
6. Provide rapid transport and alert the receiving facility of the specific snake.

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## B. Coral Snake Bites

Includes North American coral snakes.

### EMR/BLS

1. For any known or suspected bite, refer to Antivenin Bank [Procedure 33](#).
2. Evaluate for specific signs/symptoms:
  - a) Most signs and/or symptoms may be delayed up to 12 hours and are related to the type of venom which is that of a neurotoxin. Therefore, CNS disturbances may be observed.
  - b) Stroke-like signs and/or symptoms.
3. Respiratory paralysis may develop. Be prepared to manage respiratory distress and provide ventilatory assistance.
4. Wrap an elastic bandage snugly around the bitten limb starting at the site of the bite and working towards the heart (proximal), wrapping the entire extremity. Wrap the elastic bandage as snug as you would for a sprained ankle. Monitor distal circulation by capillary refill and/or pulse to ensure the wrap does not become a tourniquet.
5. If possible, keep the injured area in a neutral position and splint to minimize movement.



### ALS

6. Establish IV access.
7. Provide rapid transport and alert the receiving facility of the specific snake.

## C. Exotic Snakes

Includes cobras, vipers, mambas, etc.

In the case of an exotic bite, it is imperative to identify the snake's scientific name or at least its common name. Signs and symptoms will vary greatly among different species. Have the FAO contact the Anti-Venom Unit immediately.



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## D. Brown Recluse Spider Bites

### EMR/BLS

1. Evaluate for specific signs/symptoms;
  - a. Small bleb surrounded by a white ring.
  - b. Localized pain, redness and swelling.
  - c. Localized tissue necrosis.
  - d. Most patients are unaware that they were bitten until the area becomes ischemic and ulcerates.
2. There is no specific pre-hospital treatment.



## E. Black Widow Spider Bites

### EMR/BLS

1. For any known or suspected bite, refer to Antivenin Bank [Procedure 33](#).
2. Evaluate for specific signs/symptoms:
  - a) Immediate localized pain.
  - b) Progressive muscle spasms (usually beginning in the back and abdomen).
  - c) Rigid abdomen.
  - d) Seizures.
  - e) Paralysis.



**ALS**

1. For severe muscle spasms, administer **Midazolam (Versed) 5 mg IV/IO/IM.**

*Pediatric Care*

1. Provide **rapid transport.**
2. For severe muscle spasms consider administration of **Midazolam (Versed) 0.1 mg/kg IV/IO/IM.**

**MCP**

3. Additional doses of Versed.

## F. Scorpion Stings

**EMR/BLS**

1. Evaluate for specific signs/symptoms:
  - a) Mild to sharp pain which often progresses to numbness.
  - b) Salivation.
  - c) Slurred speech.
  - d) Muscle twitching.
  - e) Allergic reaction.
2. Provide rapid transport if symptomatic.



## G. Marine Animal Envenomation

Includes Stingrays, Scorpion fish, Catfish, Lionfish, Starfish, and Sea Urchins.

EMR/BLS



1. Immerse the puncture(s) in non-scalding hot water to tolerance (112-120 degrees Fahrenheit) to achieve pain relief. Transport should not be delayed; immersion in non-scalding hot water may be continued during transport as it may take 30-90 minutes for total relief.
  - a) Gently apply hot packs to affected area for pain relief.
2. If the spine is still embedded, do not attempt removal in the field.

## H. Marine Animal Stings

Includes Jellyfish stings (Man-O-War, Sea Nettle, Hyroid, and Fire Coral).

EMR/BLS

1. Rinse with seawater. **DO NOT use fresh water, ice, or rub the skin.**
2. Apply vinegar, if available, to temporize the release of venom.
3. Attempt to remove the tentacles with the edge of a stiff card such as a credit card. When using an edge, wipe down and away in a proximal to distal motion. Do not attempt to just wipe or roll the tentacles.
4. Repeat vinegar application.
5. Gently apply hot packs to affected area for pain relief.



**Note:** Refer to [Protocol 18](#) for pain management after appropriate care under this protocol has been administered.

**Note:** MDFR lifeguards may consider the use of hot water for at least 20 minutes. Hot water is available inside the lifeguard's station.

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