

6. Patient pertinent history
7. Patient physical with special consideration to area of envenomation especially crotalid bite

Treatment and Interventions

1. Consider an IV fluid bolus (normal saline or lactated Ringer's) 20 mL/kg up to 2 liters
2. Consider vasopressors after adequate fluid resuscitation for the hypotensive patient [for adult vs. pediatric dosing, see [Shock Guideline](#)]
3. If seizure, treat per [Seizures Guideline](#)
4. Specific therapy for select bites, stings, or envenomation
 - a. Envenomations that are known to antivenom readily available in the USA include black widow spider, bark scorpions, crotalid snakes (rattlesnake, copperhead) and coral snakes
 - i. For these envenomations, consider transport to a hospital that has access to antivenom, if feasible
 - b. Jellyfish
 - i. As there is a significant variety and diversity of jellyfish, it is important to be familiar with the species and the appropriate treatment for your local aquatic creatures
 - ii. Generally, scrape off any remaining tentacles or nematocysts, then immerse affected body part in hot water (113°F/45°C). Vinegar may be used to reduce pain due to deactivation of the nematocysts remaining in the skin except for stings from certain species of jellyfish (i.e., Physalia, a species found in Australian waters) which may have nematocysts activated by vinegar (acetic acid). Vinegar may also activate the nematocysts of sea nettles and is not recommended after this type of jellyfish exposure
 - c. Lionfish, scorpionfish, stingray:
 - i. Immerse affected body part in hot water to reduce the pain associated with the toxin
5. Provide adequate analgesia per the [Pain Management Guideline](#)

Patient Safety Considerations

1. Do **NOT**:
 - a. Apply tourniquets, tight Ace®/crepe bandage, or constricting bands above or below the site of the envenomation
 - b. Incise and/or suction wound to remove toxin
 - c. Apply cold packs or immerse the effected extremity in ice water (cryotherapy)
2. EMS clinicians should not try to capture the marine or terrestrial animal or insect
3. If the organism has been killed, beware that many dead insect, marine, or fanged animals can continue to bite or sting with venom and should be safely placed in a hard sided and closed container for future identification
4. Patient may still have an imbedded stinger, tooth, nematocyst, or barb which may continue to deliver toxin if left imbedded. Consider safe removal without squeezing the toxin delivery apparatus