



Envenomation Trauma

Austin County
EMS Protocol & Guideline

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Overview: There are many animals that can injure patients with bites and/or stings. Our region is home to only two venomous spiders, the Black Widow and Brown Recluse, and four venomous snakes, Copperheads, Cottonmouths, Rattlesnakes, and the Coral Snake. Be familiar with these animals for easy recognition. NEVER transport a live animal in the unit to the hospital. You may take a picture of the animal within reason and with safety as number one priority.



Definition: Bites can pose a serious threat in terms of trauma as well as infection from introduction of bacteria into the wound from the mouth; this is especially true in cases of human bites. Envenomation is the process of venom being injected into the patient by means of a bite and/or sting. Proper identification of the animal is key in cases of envenomation for appropriate definitive treatment.

EMT

- Immediately stop any significant bleeding
- Airway appropriate to patient presentation.
- Maintain provider safety
- Remove pt. From danger of repeated stings or bites.
- Identify insect that caused injury if possible.
- Watch for anaphylactic reaction.
- Transport pt. as rapidly as possible.
- Contact Poison Control & OLMC.

AEMT

- Establish IV of Normal Saline

Paramedic

Muscle spasms

- **Diazepam** 2-10 mg IV, IM or IN. May repeat one time in 10 minutes.
- **Manage pain** – See Pain Management protocol

Snake Bite

- Immobilize the injured extremity
- Elevate wound location to a neutral position if able
- Remove any constricting clothing/bands/jewelry
- DO NOT apply ICE
- Mark margin of swelling, redness and time
 - If significant swelling continues, trend by marking off subsequent margins with corresponding time.
- If snake has been identified, notify the hospital

Insect Sting/Spider Bite

- Immobilize the injured extremity
- Elevate the wound to a neutral position if able
- Apply ice packs (maximum of 20 minutes)
- Remove any constricting clothing/bands/jewelry
- If Anaphylaxis: See **Allergic Reaction** protocol
- If **Muscle Spasms** occur:
 - **Midazolam 0.5 – 2 mg IV or 5 mg IM**
 - **Max total dose 5 mg**

Dog/Cat/Human Bite

- Irrigate wound
- Bandage appropriate to patient
- Immobilize

PEARLS

- Always inquire about any known environmental allergies, especially in cases of insect bites/stings.
- Be aware that with snakes some reflexes can remain intact after death for a period of time. This can result in a bite even after it has been killed.
- A honey bee can sting only once because the stinger and attached venom sac is ripped away from the bee's body (see photo below). The venom then continues to pump through the stinger into the wound. This is why it is important to remove the stinger as quickly as possible to decrease the amount of venom injected. To properly remove a bee stinger, use a straight edge, such as that of a credit card, and scrape the stinger out.

