

Sierra – Sacramento Valley EMS Agency Treatment Protocol

Bites and Envenomations



Effective: 06/01/2016

Next Review: 04/2019

E-4 (LALS)

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Important Caveats For Medical Responders

- Ensure the scene is safe. Attempt to determine and differentiate what animal/reptile/insect/etc. the bite or sting is from, however, **DO NOT** attempt to catch or transport the live animal/reptile/insect/etc. with the patient. A digital photograph is preferred for identification purposes if safe to do so. However, if the animal/reptile/insect/etc. is dead, prehospital personnel may consider bringing it in with the patient for positive identification in a closed solid container. Avoid the head and fangs on pit vipers as they are capable of envenomation even when dead.
- Black Widow spider bites cause diaphoresis, severe cramping and pain. Most cramping from Black Widow bites occurs in the abdomen, groin, back and legs.
- Bites from Brown Recluse, Hobo Spiders and others in the sicariidae family, may cause a painless bite with tissue necrosis and clotting disorders developing over several days with little to no immediate symptoms. There are **NO** Brown Recluse Spiders native to California and they are very rare, usually brought or transported from another state. There is **NO** current antivenom for this class of spider.
- Stings from Scorpions may cause pain and red welt at the sting site(s) as well as uncontrolled muscle jerking, pain, eye twitching, hypotension and increased salivation especially in those with significant health history and/or of extremes of age.
- Bites from Centipedes may cause pain, minor bleeding and red welt at the sting site(s). General first aid is usually all that is needed.
- Stings from Bees, Wasps and Ants may cause pain, very minor bleeding and red welt at the sting site(s). General first aid is usually all that is needed, however, there is a risk for anaphylaxis, especially in patients with history of reaction or who have received multiple stings.
- Bites from Pit Vipers and others in the crotalinae family are hemotoxic and cytotoxic and may cause pain, localized tissue destruction and edema. Oral parasthesia or metallic taste in the mouth may represent systemic toxicity. Hypotension may be due to fluid loss as a result of edema and usually resolves with antivenom. However, it may be due to the venom itself if no significant edema is noted. Contact base/modified base hospital for medical consultation if this occurs
- Bites from Coral Snakes and others in the elapid family, are neurotoxic and lack the impressive signs of envenomation of Pit Vipers, but may cause neuromuscular weakness and rapid respiratory depression and failure.
- Venomous bites and mammal bites to face, tongue, mouth and neck or direct stings to the tongue and mouth are imminent airway emergencies and will need to be addressed early.

BLS

- Assess ABC's, manage airway and assist ventilations as appropriate
- O₂ at appropriate flow rate
- Assess V/S including pulse oximetry
- Immediate rapid transport should occur for venomous snake bites and/or anaphylaxis related to bites/stings with treatment performed enroute

For Specific Treatment See Pages 2 & 3



Snakebite, Spider/Centipede Bite, Bee/Wasp/Scorpion/Ant Stings

BLS

**Spider/Centipede Bite or
Bee/Wasp/Scorpion/Ant Stings**

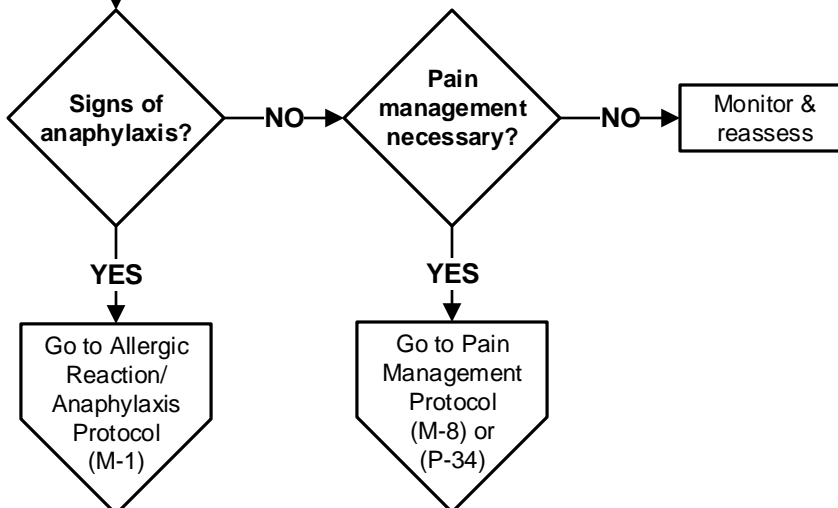
Snakebite - Venomous

- Loosely immobilize or splint injury (if in extremity) in position of comfort at or above heart level
- Clean wound site and control bleeding
- Apply ice for pain control as needed
- Remove any constrictive clothing/jewelry/bands
- Monitor for signs of anaphylaxis
- While very rare, severe reactions to Black Widow bites and some Scorpion stings may require antivenom, especially in patients with significant health history and/or in the extremes of age
- If patient shows potential need for antivenom, contact base/modified base hospital ASAP

- Loosely immobilize or splint injury (if in extremity) in position of comfort at or above the heart level
- Remove any constrictive clothing /jewelry/bands
- Clean wound site and control bleeding
- **DO NOT** start IV/IO lines or apply B/P cuff to bitten extremity
- **DO NOT** cut or slice wound or use suction on wound to remove venom
- **DO NOT** apply ice
- **DO NOT** apply tourniquets or lymphatic constriction wraps/banding
- Document the time of the bite
- Monitor for signs of anaphylaxis
- Mark margin of swelling/redness, including time
- Pre-alert receiving hospital of probable need for antivenom if moderate to severe bite noted
- If snake bite was from an exotic pet or zoo animal (e.g. coral, cobra, krait, mojave), neurologic and/or respiratory depression may precede local reaction, observe closely for mental status change, respiratory depression, convulsions or paralysis
- If exotic species, contact base/modified base hospital ASAP as they may need to consult with physician expert and coordinate with Poison Control for specific antivenom

LALS

- Cardiac monitor (AEMT II ONLY)
- Advanced airway if necessary
- Consider IV/IO NS TKO: may bolus up to 1000 ml for adults, or 20 ml/kg for pediatrics





Dog/Cat/Other Mammals/Human Bites

