	COUNTY OF SACRAMENTO EMERGENCY MEDICAL SERVICES AGENCY	Document #	8028.15
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Signature on File	Signature on File
EMS Medical Director	EMS Administrator

Purpose:

A. To establish the treatment standard for prehospital personnel treating patients suffering from environmental emergencies.

Authority:

- A. California Health and Safety Code, Division 2.5
- B. California Code of Regulations, Title 22, Division 9

Protocol:

Frostbite:

BLS

- 1. Supplemental O_2 as necessary to maintain $SpO_2 \ge 94\%$. Use lowest concentration and flow rate of O_2 as possible.
- 2. Airway adjuncts as needed.
- 3. Remove wet/frozen clothing and place patient in a warm environment.
- 4. Assess area of frostbite; check circulation, sensation and movement of extremities
 - Do not rub-protect from further trauma, contamination, or moisture
- 5. Transport in position of comfort.

Hypothermia:

BLS

- 1. Supplemental O_2 as necessary to maintain $SpO_2 \ge 94\%$. Use lowest concentration and flow rate of O_2 as possible.
- 2. Airway adjuncts as needed.
- 3. Assess for trauma
- 4. Place in a warm environment, remove wet clothes; re-warm with warm clothes and blankets.
- 5. Handle patients with care, sudden jarring of patients may precipitate cardiac arrest.

*If in cardiac arrest perform CPR until patient can be warmed in hospital. *

ALS

- 1. Advanced airway adjuncts as needed.
- 2. Cardiac Montitoring
- 3. Consider vascular access.
- 4. Monitor and reassess.
- 5. If in cardiac arrest refer to policy 8031.
- 6. Transport

Hyperthermia:

BLS

- 1. Supplemental O_2 as necessary to maintain $SpO_2 \ge 94\%$. Use lowest concentration and flow rate of O_2 as possible.
- 2. Airway adjuncts as needed.
- 3. Place patient in a cool area and remove clothing as appropriate.
- 4. Transport

If sweating is absent, proceed with cooling patients as rapidly as possible (cool packs on neck, in axilla and inguinal areas; fanning and misting, if possible, undress patient, cover with sheet and wet thoroughly.)

ALS

- 1. Advanced airway adjuncts as needed.
- 2. Consider vascular access.
- 3. Cardiac Monitoring
- 4. Transport

Near Drowning:

BLS

- 1. Supplemental O_2 as necessary to maintain $SpO_2 \ge 94\%$. Use lowest concentration and flow rate of O_2 as possible.
- 2. Airway adjuncts as needed.
- 3. Consider Spinal Motion Restriction (SMR) per policy 8044
- 2. Transport

ALS

- 1. *Follow appropriate protocol*
- *Body temperature criteria shall not be used as criteria for declaring death.*

Snake Bite:

BLS

- 1. Supplemental O_2 as necessary to maintain $SpO_2 \ge 94\%$. Use lowest concentration and flow rate of O_2 as possible.
- 2. Airway adjuncts as needed.
- 3. Assess site of wound for swelling redness from stings/bites.
- 4. Immobilize affected extremity at or slightly below the level of the heart.
- 5. Keep patient at rest.
- 6. Transport
- 7. Pre-alert receiving hospital of possible need for antivenom if moderate to severe venomous snake bite is noted.

NOTE: If the patient is experiencing signs and symptoms of anaphylaxis, treat per PD# 8001 – Allergic Reaction/Anaphylaxis.

Degree of Envenomation	<u>Presentation</u>	
None	Punctures or abrasions; some pain or tenderness at the bite.	
Mild	Pain, tenderness, edema at the bite; perioral pareshesias may be present.	
Moderate	Pain, tenderness, erythema, edema beyond the area adjacent to the bite; often, systemic manifestations and mild coagulopathy.	
Severe	Intense pain and swelling of entire extremity, often with severe systemic signs and symptoms; coagulopathy	
Life-threatening	Marked abnormal signs and symptoms; severe coagulopathy	
*DO NOT APPLY ICE OR TOURNIQUET TO SITE *		
*DO NOT BRING DEAD SNAKE TO THE HOSPITAL, TAKE A PICTURE IF POSSIBLE *		
ALS		
Assess for anaphylaxis and treat per PD# 8001		

Stings / Bites:

BLS

- 1. Supplemental O_2 as necessary to maintain $SpO_2 \ge 94\%$. Use lowest concentration and flow rate of O_2 as possible.
- 2. Airway adjuncts as needed.
- 3. Assess skin for swelling, redness and rash. If extremity, check distal circulation, sensation and movement
- 4. Keep affected extremities at level of heart and immobilize.
- 5. Transport

Apply ice for insect bite, not snake bites.

NOTE: If the patient is experiencing signs and symptoms of anaphylaxis, treat per PD# 8001 – Allergic Reaction/Anaphylaxis.

ALS

1. *Assess for anaphylaxis and treat per PD# 8001 – Allergic Reaction/Anaphylaxis*

Cross Reference: PD# 8001 – Allergic Reaction/Anaphylaxis

PD# 8031 – Cardiac Arrest

PD# 8038 - Shock

PD# 8044 - Spinal Motion Restriction (SMR)