	COUNTY OF SACRAMENTO EMERGENCY MEDICAL SERVICES AGENCY	Document #	9004.21
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	Pediatric Burns	Last Approval Date:	09/14/23
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Signature on File	Signature on File	
EMS Medical Director	EMS Administrator	

Purpose:

A. To establish a treatment standard for pediatric patients burned by caustic material, electricity, or heat.

Authority:

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

Protocol:

A. The ability to maintain the temperature in prehospital settings is a significant problem with a dose-dependent increase in mortality for temperatures below 37°C or 98.6°F. Simple interventions to prevent hypothermia can reduce mortality. During transport, warm and maintain normal temperature, being careful to avoid hyperthermia.

BLS

- 1. Remove the patient from the source of the burn, then remove burning or smoldering clothing and remove jewelry
- 2. Perform ABCs
- 3. Assess for inhalation injury (singed nasal hairs, hoarse voice or stridor, oral or facial burns) and administer supplemental O₂ as necessary to maintain SpO2 ≥ 94%. Be prepared to support ventilation with appropriate airway adjuncts.
- 4. Estimate the size of the burn (see below)
- 5. For burns < 30% TBSA AND no inhalation injury, stop the burning process by applying cool running water over the burn. The goal is cumulative (bystander and first responder) application of cool running water for 20 minutes. Whenever possible, this should be completed prior to transport.
 - a. It is critical that providers remain on scene to complete a full 20 minutes of continuous cooling with running water before initiating transport unless the scene becomes unsafe or the patient's condition necessitates immediate transport.
 - b. Early cessation of cooling may lead to worsened burn severity and increased tissue damage. If transport is initiated before 20 minutes of cooling is completed, cooling should continue en route whenever feasible.
- 6. After cooling the burn, apply a covering to the burn (dry non-stick gauze, loose plastic wrap, etc.).
- 7. Avoid hypothermia by isolating and cooling only the burned area. Keep unaffected body parts warm by covering them as much as possible, and use the heater in the passenger compartment.
- 8. Caustic and Chemical Burns: Wear protective clothing and gloves and consider the presence of hazardous materials. Remove the patient's clothing. Apply cool running

water over the burn for 20 minutes. Do not scrub.

- 9. Electrical Burns: Check for, and dress all entrance and exit wounds.
- 10. Avoid hypothermia by isolating and cooling only the burned area. Keep unaffected body parts warm by covering them as much as possible, and use the heater in the passenger compartment.
- 11. After cooling the burn, apply a covering to the burn (dry non-stick gauze, loose plastic wrap, etc.).

NOTE: Check for associated injuries. Treat shock, if present.

Do not apply ice or creams to the burned area.

Fire in enclosed space suggests smoke inhalation or carbon monoxide poisoning.

ALS

- 1. Initiate vascular access in patients with major burns (> 9%). For BSA > 9% or hypotension. Administer 20ml/kg NS fluid bolus.
 - When possible the preferred vascular access site is an unburned area.
- 2. Albuterol (if wheezes present)
 - 5 mg via HHN, mask or BVM.
- 3. Cardiac monitor with SpO₂.

If partial thickness burn with severe pain and without evidence of or mechanism of internal head, chest or abdominal injury:

4. Consider administration of pain medication as per PD# 9018-Pediatric Pain Management.

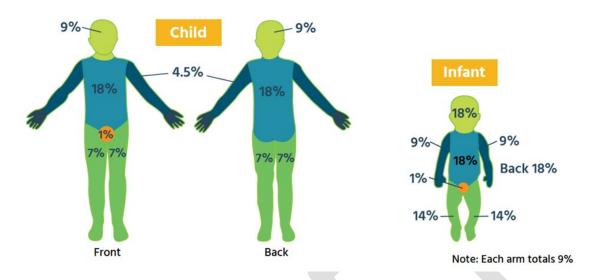
NOTE: Any patient with the following shall be transported to UCDMC Burn Center:

- Partial thickness >9% of body surface.
- Any electrical or any chemical burn.
- Evidence of possible Inhalation Injury.
- Any burn to the face, hands, feet, genitalia, perineum or major joints.
- Cardiac arrest shall go to the closest E.D.

Estimating Burn Size (either method can be used):

Rule of Palm: The palm of the person who is burned (not the fingers or wrist area) is about 1% of the body. Use the person's palm to measure the body surface area burned.

Rule of Nines:



Cross Reference: PD# 9018 – Pediatric Pain Management PD# 8837 – Pediatric Airway Management

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