

**PEORIA AREA EMS SYSTEM
PEDIATRIC PREHOSPITAL CARE MANUAL**

Pediatric Burn Protocol

The primary goal in the treatment of the pediatric burn patient is the same as when caring for an adult – to stop the acute burning process by removing the patient from direct contact with the source of the burn and maintaining the patient’s body fluids. Special attention should be given to limit further pain and damage of the burn to the patient. However, burn care should not interfere with lifesaving measures.

One aspect of pediatric burn care is different and prehospital providers need to be aware of it – **suspicious burns**. Suspicious burns include burns that have a familiar pattern (e.g. circumferential burns, burns from a cigarette lighter, etc.) or a story that does not fit the injury sustained. Pediatric burns carry a high index of suspicion for abuse and neglect. Follow local protocol for reporting abuse and neglect if suspected.

First Responder Care

First Responder Care should be focused on assessing the situation, removing the child from harm and initiating routine patient care to assure that the patient has a patent airway, is breathing and has a perfusing pulse as well as beginning treatment for shock.

1. Render initial care in accordance with the *Routine Pediatric Care Protocol*.
2. Make sure the scene is safe to enter.
3. **Oxygen:** 15 L/min via non-rebreather mask. Be prepared to support the patient’s respirations with BVM if necessary.
4. **THERMAL BURN TREATMENT:**
 - a) If the burn occurred within the last 20 minutes, reverse the burning process and cool the area by flushing the area with **1 Liter of Sterile Saline** (or Sterile Water if Sterile Saline is not available). The goal of cooling is to extinguish the burning process – not to systemically cool the patient. Fluid application should be held to a minimum and discontinued if the patient begins shivering.
 - b) Remove jewelry and loose clothing. Do not pull away clothing that is stuck to the burn.
 - c) Cover the wound with sterile dressings***
 - d) Place a sterile burn sheet on the stretcher. If the patient’s posterior is burned, place a sterile burn pad on top of the sheet with the absorbent side toward the patient.

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- e) Place patient on the stretcher.
- f) Cover the patient with additional sterile burn sheets and blanket to conserve body heat.

5. ELECTRICAL BURN TREATMENT:

- a) Assure that the power service has been cut off and remove the patient from the source of electricity.
- b) Fully immobilize the patient due to forces of electrical current and possible trauma.
- c) Assess for entry and exit wounds. No cooling or flushing is necessary due to the type of burn.
- d) Cover the burn with dry, sterile dressings.
- e) Closely monitor the patient.

6. CHEMICAL BURN TREATMENT:

- a) Consider possible scene and patient contamination and follow agency safety procedures.
- b) Note which chemical agent caused the burn and obtain the MSDS for that chemical (if possible).
- c) The patient's clothing should be completely removed to prevent continued exposure and the patient decontaminated **prior to** being placed in the ambulance for transport.
- d) **Dry chemical powder** should be brushed off before applying water.
- e) Irrigate the patient with Sterile Water and if the MSDS indicates use of water will not cause an adverse reaction. Body parts should be flushed for at least 1-2 minutes. Do not use Sterile Saline on chemical burns.
- f) Irrigate burns to the eye with Sterile Water for at least 20 minutes. Alkaline burns should receive continuous irrigation throughout transport.

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BLS Care

BLS Care should be directed at conducting a thorough patient assessment, initiating routine patient care to assure that the patient has a patent airway, is breathing and has a perfusing pulse as well as beginning treatment for shock and preparing the patient for or providing transport.

1. Includes all components of *First Responder Care*.
2. Initiate ALS intercept and transport as soon as possible.
3. **Contact Medical Control** as soon as possible.

ILS Care

ILS Care should be directed at continuing or establishing care, conducting a thorough patient assessment, stabilizing the patient's perfusion and preparing for or providing patient transport.

1. Includes all components of *First Responder Care*.
2. **IV Fluid Therapy:** 20mL/kg fluid bolus to a maximum of 60mL/kg (*Note:* Exceeding 40mL/kg requires **Medical Control order**).
3. Initiate ALS intercept and transport as soon as possible.
4. **Contact Medical Control** as soon as possible.

ALS Care

ALS Care should be directed at continuing or establishing care, conducting a thorough patient assessment, stabilizing the patient's perfusion and preparing for or providing patient transport.

1. Includes all components of *First Responder Care*.
2. Be prepared to intubate if necessary.
3. **IV Fluid Therapy:** 20mL/kg fluid bolus to a maximum of 60mL/kg (*Note:* Exceeding 40mL/kg requires **Medical Control order**).

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ALS Care (continued)

4. Transport and **Contact Medical Control** as soon as possible.
5. **Morphine Sulfate**: 0.1mg/kg IV/IM (*Max single dose 2mg*) every 5 minutes to reduce the patient's anxiety and severity of pain.
6. *If the patient is allergic to Morphine or if Morphine is not effective:*
Fentanyl: 1mcg/kg IV over 2 minutes for pain (*Max single dose: 50mcg*). Fentanyl 1mcg/kg may be repeated one time in **5 minutes**.
7. **Midazolam (Versed)**: 0.1mg/kg IV over 1 minute (*Max single dose: 2mg*). May repeat Midazolam (Versed) 0.1mg/kg IV once in **5 minutes**.

OR

Midazolam (Versed): 0.2mg/kg IM (*Max single dose: 5mg*) if attempts at IV access have been unsuccessful. May repeat dose one time in **15 minutes**.

Critical Thinking Elements

- ***WaterJel[®] may be used for **THERMAL BURNS** (after the burn has been irrigated according to protocol) if it is available.
- BurnJel[®] contains Lidocaine and may **NOT** be used in the Peoria Area EMS System.
- Treat other symptoms or trauma per the appropriate protocol.
- IV access should not be obtained through burned tissue unless no other site is available.
- Closely monitor the patient's response to IV fluids and assess for pulmonary edema.
- Closely monitor the patient's airway – have BVM, suction and/or intubation equipment readily available.
- Do not delay transport of a "Load and Go" trauma patient to care for burns.
- For chemical/powder burns, be aware of inhalation hazards and closely monitor for changes in respiratory status.
- **In patients with known renal failure, the Fentanyl dose must be reduced to 0.5mcg/kg (Max single dose: 25mcg). The dose may be repeated one time.**