	COUNTY OF SACRAMENTO EMERGENCY MEDICAL SERVICES AGENCY	Document #	9018.10
	PROGRAM DOCUMENT: **Pediatric Pain Management**	Initial Date:	07/23/13
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Signature on File	Signature on File
EMS Medical Director	EMS Administrator

Purpose:

A. To establish the treatment standard in treating pediatric patients with complaints of pain.

Authority:

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

Protocol:

Every patient deserves to have their pain managed. Not all painful conditions require advanced life support (ALS) intervention. Basic life support (BLS) pain management methods (reassurance, adjusting the position of comfort, ice or heat, and gentle transport) can be considered before deciding to treat with analgesic medication.

NOTE: Analgesic medications should be considered in ALL patients complaining of pain. With the exception of Ketamine and Acetaminophen, analgesics should be avoided if the patient's systolic blood pressure (SBP) is <90 mmHg, respiratory rate (RR) is ≤ 10 breaths per minute, and/or decreased sensorium or suspicion of traumatic brain injury.

BLS

1. Assess and support ABCs as needed
2. Supplemental O_2 as necessary to maintain $SpO_2 \geq 94\%$. Use the lowest concentration and flow rate of O_2 possible.
3. Assess and treat as appropriate for the underlying cause.
4. Transport.

ALS

1. Advanced Airway Adjuncts as needed.
2. Cardiac Monitor and SpO_2.
3. Initiate vascular access
4. Document the pain scale (sample scale attached below) with initial assessment/vital signs after each administration of medication and after all procedures.
5. Pain medication shall be titrated to relief if the pain is not effectively managed with basic life support (BLS) pain management methods.
   a. Fentanyl Citrate
      - 1 mcg/kg (maximum single dose 100 mcg) slow IV, IO, or IN every 5 minutes. Maximum cumulative dose of 3 mcg/kg (300 mcg) total.
   b. Morphine Sulfate (if Fentanyl is unavailable)
      - 0.1 mg/kg (maximum single dose 10mg) slow IV, IO, or IN every 5 minutes.

- Maximum cumulative dose of 0.2 mg/kg (20 mg).

c. Ketamine
   - Mix 0.3 mg/kg Ketamine (maximum single dose = 30mg) in 50-100cc normal saline solution (NSS) or D5W and administer slow IV drip over ten (10) minutes.
   - If pain remains at, or returns to, moderate or severe, you may administer a second dose of 0.3 mg/kg Ketamine (max dose=30 mg) in 50-100cc NSS or D5W and administer slow IV drip over ten (10) minutes.

d. Acetaminophen (Ages ≥ 4 years and/or ≥ 10 kg).
   - 15 mg/kg IV/IO infusion over 15 minutes (maximum dose 1000 mg) or 15 mg/kg PO (maximum dose 1000 mg).
   - Do not repeat.

e. Ketorolac (ages ≥ 4 years and/or ≥ 10 kg).
   - 0.5 mg/kg slow IV/IO push or IM.
   - Maximum single dose of 15 mg (by any route).
   - Do not repeat.

Precautions/Contraindications:

1. Check the patient's allergies before administering any medication.
2. Ketamine should be avoided in the following patients:
   - Chest pain of suspected cardiac origin
   - Pregnancy
3. Ketorolac should be avoided in the following patients:
   - Active bleeding.
   - Active wheezing.
   - Age < 4 years old of > 65 years old.
   - Allergy to Non-Steroidal Anti-inflammatory agents (NSAIDs).
   - Current Anticoagulation therapy.
   - Head or Multisystem trauma.
   - History of peptic ulcer disease or upper GI bleeding.
   - History of renal disease or kidney transplant.
   - Known or suspected pregnancy.
   - Suspected sepsis or septic shock.

Examples of a 0-10 Pain Scales

	0
Minor Able to adapt to pain	**1** **Very Mild**
	2 **Discomforting**
	3 **Tolerable**
Moderate Interferes with many activities.	**4** **Distressing**
	5 **Very Distressing**
	6 **Intense**
Severe Patient is disabled and unable to function independently.	**7** **Very Intense**
	8 **Utterly Horrible**
	9 **Excruciating Unbearable**
	10 **Unimaginable Unspeakable**

Wong-Baker FACES Pain Rating Scale

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Cross Reference: PD# 9004 - Pediatric Burns
PD# 9016 - Pediatric Parameters
PD# 9017 - Pediatric Trauma