Medical Control Guideline: PAIN MANAGEMENT

PRINCIPLES:

1. All patients should undergo pain assessment and management, regardless of age or ability to communicate in English.

2. Uncontrolled pain has been associated with both short-term and long-term adverse outcomes.

3. Measurement of a patient’s pain is subjective; therefore, the patient who is able to communicate best determines the presence and severity of their pain.

4. Recording a pain level using a validated pain scale provides health care providers with a baseline against which to compare subsequent evaluations of the patient’s pain.

5. Los Angeles County utilizes the “Numeric Pain Intensity”, “Facial Expression”, and FLACC (Face, Legs, Activity, Cry and Consolability) pain scales.

6. Pain management includes both pharmacologic and non-pharmacologic interventions, such as distraction, positioning, and medication administration which may be provided concurrently or in an escalating fashion.

7. When choosing a pain management strategy, providers should utilize their clinical judgment to select the most appropriate initial therapy. Treatment may be escalated as needed to achieve pain control.

GUIDELINES:

1. Pain assessment should be performed on patients of all ages as part of the initial patient assessment and should include severity as measured on one of the 3 formal pain scales used by Los Angeles County.

2. For verbal patients 8 years of age or older, use the Numeric Pain Intensity scale by asking the patient to rate their pain on a 0-10 scale; zero (0) equals no pain and ten (10) equals the most severe pain. Document the number selected on the EMS Report Form.

3. For patients 4-7 years old, or for patients with limited English proficiency, use the Facial Expression pain scale.
4. For children < 4 years of age or for patients who are non-verbal due to baseline medical conditions such as cognitive impairment or severe dementia, utilize the FLACC Behavioral Tool. The patient should be assessed in each of the 5 categories shown in the table below, with the pain severity determined based on the total score on a scale of 0-10.

<table>
<thead>
<tr>
<th>Behavior</th>
<th>0</th>
<th>1</th>
<th>2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Face</td>
<td>No particular expression or smile</td>
<td>Occasional grimace or frown, withdrawn, disinterested</td>
<td>Frequent to constant frown, clenched jaw, quivering chin</td>
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<tr>
<td>Legs</td>
<td>Normal position or relaxed</td>
<td>Uneasy, restless, tense</td>
<td>Kicking or legs drawn up</td>
</tr>
<tr>
<td>Activity</td>
<td>Lying quietly, normal position, moves easily</td>
<td>Squirming, tense, shifting back and forth, hesitant to move, guarding</td>
<td>Arched, rigid or jerking, fixed position, rubbing of body part</td>
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<tr>
<td>Cry</td>
<td>No cry/moan (awake or asleep)</td>
<td>Moans or whispers, occasional cries, sighs or complaint</td>
<td>Cries steadily, screams, sobs, moans, groans, frequent complaints</td>
</tr>
<tr>
<td>Consolability</td>
<td>Calm, content, relaxed, needs no consoling</td>
<td>Reassured by hugging, talking to, distractible</td>
<td>Difficult to console or comfort</td>
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</tbody>
</table>

5. Reassess the patient’s pain with each assessment of vital signs and after any intervention, including patient movement into the ambulance. Document pain reassessment on the Patient Care Record.

6. Provide indicated treatment to patients with mild to severe pain as measured on any 0-10 scale per the table below. Nonpharmacologic methods should be used for all patients regardless of pain scale.

<table>
<thead>
<tr>
<th>Pain Score</th>
<th>Indicated Treatment(s)</th>
<th>Considerations</th>
</tr>
</thead>
<tbody>
<tr>
<td>≥1</td>
<td>Ice packs</td>
<td>For pain scores ≥4, use in conjunction with most appropriate analgesic(s).</td>
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<tr>
<td></td>
<td>Distraction</td>
<td></td>
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<tr>
<td></td>
<td>Positioning for comfort</td>
<td></td>
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<tr>
<td></td>
<td>Splinting</td>
<td></td>
</tr>
<tr>
<td>≥4</td>
<td>Ketorolac</td>
<td>For pain score ≥7, may use in conjunction with opioid or alone if other analgesics are contraindicated. Avoid in cardiac chest pain.</td>
</tr>
<tr>
<td>≥7</td>
<td>Fentanyl</td>
<td>May only administer ONE of these medications. May administer in conjunction with ketorolac. Opioids should be administered alone for cardiac chest pain.</td>
</tr>
<tr>
<td></td>
<td>Morphine</td>
<td></td>
</tr>
</tbody>
</table>
7. Consider ketorolac in patients with mild to moderate pain (pain score $\geq 4$). Ketorolac may also be given in patients with moderate to severe pain (pain score $\geq 7$) in conjunction with opioids, or when contraindications to other analgesics exist (e.g., hypotension, respiratory failure, opioid allergy).

**Ketorolac Dosing**

**Adult Dose**
- 15mg (1mL) slow IV/IO push, or
- 30mg (2mL) IM

**Pediatric Dose**, only for 4 years of age or older
- 0.5mg/kg (15mg/mL) slow IV/IO push/IM, dose per MCG 1309 (maximum dose 15mg any route)

**Contraindications**
- Active bleeding
- Active wheezing
- Age <4 years old or >65 years old
- Allergy to NSAIDs
- Current anticoagulation therapy
- Head injury
- History of upper GI bleeding or peptic ulcer disease
- History of renal disease or kidney transplant
- Known or suspected pregnancy
- Suspected sepsis or septic shock

8. Consider opioid analgesia (Fentanyl or Morphine) for patients with moderate to severe pain (pain score $\geq 7$). These analgesics should be considered equivalent options, however there are scenarios where one agent is preferred:

Opioids preferred: cardiac chest pain, children under 4 years of age

**Fentanyl Dosing**

**Adult Dose**
- 50mcg (1mL) slow IV push or IM/IN, repeat every 5 min prn, maximum total dose prior to Base contact 150mcg

**Pediatric Dose**
- 1mcg/kg (50mcg/mL) slow IV push or IM, dose per MCG 1309, or
- 1.5mcg/kg (50mg/mL) IN, dose per MCG 1309
  Repeat in 5 min prn x1, maximum 2 total doses prior to Base contact

**Contraindications**
- History of allergy to fentanyl

**Contact Base** for additional pain management after maximum dose administered: may repeat as above up to maximum total dose of Fentanyl 250mcg

**Morphine Dosing**

**Adult Dose**
- 4mg (1mL) slow IV/IO push, repeat every 5 min prn, maximum total
dose prior to Base contact 12mg

**Pediatric Dose**

0.1mg/kg (4mg/mL) slow IV/IO push, dose per MCG 1309, repeat in 5 min x1, maximum 2 total doses prior to Base contact

**Contraindications**

- Hypotension or evidence or poor perfusion
- History of allergy to morphine

**Contact Base** for additional pain management after maximum dose administered: may repeat as above up to maximum total dose of Morphine 20mg

9. Use caution when administering pain medications in the following patient situations:

   a. Elderly patients
   b. Adults with SBP <90mmHg; Pediatrics with SBP <70mmHg (Ketorolac preferred – this agent is less likely to worsen hypotension)
   c. Potential for respiratory failure (ketorolac preferred – this agent is less likely to worsen respiratory depression)
   d. Suspected drug/alcohol intoxication

10. When giving opioids, consider administering ondansetron 4mg ODT or IV prior to or concurrent with administration of first dose in patients 4 years of age or older. These medications may cause nausea and vomiting.

11. Location of intramuscular injections are as follows:

   a. Pediatric patients 14 years of age or younger use the lateral thigh (vastus lateralis)
   b. Adult patients 15 years of age or older use the deltoid or the vastus lateralis

12. Document and report all interventions performed for pain management, whether pharmacologic or non-pharmacologic. These may include, but are not limited to:

   a. Nonpharmaceutical:
      i. Splinting
      ii. Distraction with devices (e.g. video viewing)
      iii. Ice pack application
      iv. Positioning for comfort

   b. Pharmacologic: Medication administration

13. Contact Base for orders if patient’s condition requires additional dosing of medications beyond that permitted by Treatment Protocol.