

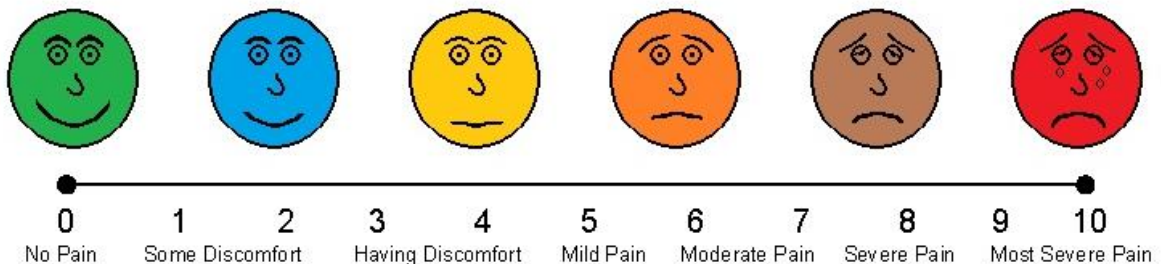
Medical Control Guideline: PAIN MANAGEMENT

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.

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Face	No particular expression or smile	Occasional grimace or frown, withdrawn, disinterested	Frequent to constant frown, clenched jaw, quivering chin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

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.

Pain Score	Indicated Treatment(s)	Considerations
≥1	Ice packs Distraction Positioning for comfort Splinting	For pain scores ≥4, use in conjunction with most appropriate analgesic(s).
≥4	Ketorolac	For pain score ≥7, may use in conjunction with opioid or alone if opioids are contraindicated. Avoid in cardiac chest pain.
≥7	Fentanyl Morphine	May only administer ONE of these medications. May administer in conjunction with ketorolac. Opioids should be administered alone for cardiac chest pain.

7. Consider ketorolac in patients with mild to moderate pain (pain score ≥ 4). Ketorolac may also be given in patients with moderate to severe pain (pain score ≥ 7) in conjunction with opioids, or when contraindications to other opioids 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 nonsteroidal anti-inflammatory agents (NSAIDs)
Current anticoagulation therapy
Current steroid use
Head or multisystem trauma
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 ≥ 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 (50mcg/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
Pregnant patients in labor

Contact Base for up to two additional doses based on continued pain assessment. Pediatric dosing based on reference 1309 and is weight based. Adult total maximum dose is 250 mcg all routes.

Morphine Dosing**Adult Dose**

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

Pediatric Dose

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

Contraindications

Hypotension or evidence of poor perfusion
History of allergy to morphine
Pregnant patients in labor

Contact Base for up to two additional doses based on continued pain assessment. Pediatric dosing based on reference 1309 and is weight based. Adult total maximum dose is 20 mg all routes.

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. Nonpharmacologic:
 - 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.