

HEALTHEAST MEDICAL TRANSPORTATION

MEDICAL OPERATIONS MANUAL

1C PAIN and NAUSEA MANAGEMENT

PATIENT CARE GOALS

- Perform a comprehensive assessment of pain including location, characteristics, onset/duration, frequency, quality, intensity or severity, and precipitating factors and provide appropriate pain management.^{1,2}
- Make a reasonable attempt to reduce the patient's pain and nausea by at least 25%.

EMT

1. Assess the patient and provide initial care, including oxygen and vascular access, if needed, per **1A General Assessment and Care**.
2. Observe for nonverbal cues of pain including changes in vital signs, grimacing, agitation or discomfort, especially in those unable to communicate effectively.

ADULT	PEDIATRIC (less than 60 kg)
<ol style="list-style-type: none">3. Identify the patient's pain intensity by having them rate their pain on a scale of 0 to 10. For nonverbal patients or those with developmental disabilities, use the FACES Pain Scale.4. Pain rated greater than 3 or beyond the patient's acceptable level should indicate the need for pain management. These patients should be attended to by a paramedic level provider.	<ol style="list-style-type: none">3. Identify the patient's pain intensity using the following:<ol style="list-style-type: none">a. FACES Pain Scale for children 4 and older or nonverbal children.³b. FLACC Pain Scale for children 3 months to 4 years old and developmentally delayed older children.⁴4. Pain rated greater than 3 or beyond the patient's acceptable level should indicate the need for pain management. These patients should be attended to by a paramedic level provider.

5. Attempt the following techniques in combination, as appropriate, to reduce anxiety and manage pain:
 - a. Acknowledge their pain.
 - b. Reassurance, calming, appropriate touch, and gentle handling and transport.
 - c. Repositioning, stabilization, padding, immobilization, and splinting.
 - d. Cold pack applied to injured areas.
 - e. Warm packs applied to musculoskeletal complaints.

PARAMEDIC

6. Treat nausea and vomiting, related or unrelated to pain as follows:

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<p>7. If tolerated or no vascular access, administer ondansetron (Zofran) 4 mg ODT. Instruct the patient to allow the tablet to dissolve in their mouth then swallow. May repeat in 10-15 minutes if needed.</p> <p>OR</p> <p>Administer ondansetron (Zofran) 4 mg IM. May repeat dose once after 10-15 minutes if needed.</p> <p>OR</p> <p>Administer ondansetron (Zofran) 4 mg IV slowly over 2-5 minutes. May repeat dose once after 10-15 minutes if needed.</p>	<p>7. Administer ondansetron (Zofran) 0.15 mg/kg (maximum 4 mg) IV slowly over 2-5 minutes.</p> <div style="border: 1px solid black; padding: 5px; margin-top: 10px;"> <p>Contact Medical Control for additional doses, if needed.</p> </div>

8. When IV pain medications are administered, patients should be monitored for hypoxia and hypoventilation using pulse oximetry and capnography.
9. Treat anxiety related to pain as per **1D Anxiety and Sedation Management**.
10. Treat pain as follows, according to the type of pain:⁵

ADULT	PEDIATRIC (less than 60 kg)
<p><u>For chronic pain of any source</u></p> <ol style="list-style-type: none"> Follow Care Plan if one exists. Contact receiving facility for order if no Care Plan is in place. <p><u>For acute traumatic orthopedic pain⁶ or chest discomfort suspicious for acute coronary syndrome⁷</u></p> <ol style="list-style-type: none"> Pain rated at <7: Administer initial dose of fentanyl (Sublimaze) 1 mcg/kg IV slowly, titrated to effect. Pain rated at 7-10 that correlates with clinical presentation: Administer initial dose of fentanyl (Sublimaze) 2 mcg/kg IV slowly in 100 mcg increments, titrated to effect. <p>OR</p> <p>All pain scores: Administer fentanyl (Sublimaze) 2 mcg/kg IN, injecting one half the dose in each nostril using the mucosal atomizing device.⁸</p> <p>OR</p>	<p><u>For chronic pain of any source</u></p> <ol style="list-style-type: none"> Follow Care Plan if one exists. Contact receiving facility for order if no Care Plan is in place. <p><u>For acute traumatic⁶ AND non-traumatic pain</u></p> <ol style="list-style-type: none"> Administer fentanyl (Sublimaze) 2 mcg/kg IV slowly, titrated to effect. <p>OR</p> <p>Administer fentanyl (Sublimaze) 2 mcg/kg IN, injecting one half the dose in each nostril using the mucosal atomizing device.⁸</p> <p>OR</p> <p>Administer fentanyl (Sublimaze) 2 mcg/kg IM.</p> <ol style="list-style-type: none"> Repeat fentanyl (Sublimaze) 0.5 mg/kg IV/IN/IM every 10-15 minutes as needed for pain to a maximum total dose of 2 mcg/kg. <div style="border: 1px solid black; padding: 5px; margin-top: 10px;"> <p>Contact Medical Control for doses exceeding 2 mcg/kg.</p> </div>

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ADULT	PEDIATRIC (less than 60 kg)
<p>All pain scores: Administer fentanyl (Sublimaze) 2 mcg/kg IM.</p> <ol style="list-style-type: none"> Repeat fentanyl (Sublimaze) 0.5 mcg/kg IV/IN/IM every 10-15 minutes as needed for pain to a maximum total dose of 400 mcg. Contact Medical Control for doses exceeding 400 mcg. <p><u>For abdominal pain or non-traumatic musculoskeletal pain</u>⁹</p> <ol style="list-style-type: none"> Pain rated at 4-6: Administer morphine sulfate 0.05 mg/kg IV/IO/IM in 5 mg increments. Pain rated at 7-10 that correlates with clinical presentation: Administer morphine sulfate 0.1 mg/kg IV/IO/IM in increments of 5 mg. Maximum initial dose 10 mg. May repeat every 10-15 minutes as needed to a maximum total dose of 20 mg. Contact Medical Control for doses exceeding 20 mg. <p><u>For musculoskeletal spasm (in addition to morphine sulfate)</u>¹⁰</p> <ol style="list-style-type: none"> Administer lorazepam (Ativan) 0.5 to 1 mg IV or 2 mg IM. May repeat every 10-15 minutes as needed to a maximum total dose of 4 mg. <p><u>For headache</u>¹¹</p> <ol style="list-style-type: none"> All pain scores: Administer ketorolac (Toradol) 30 mg IV/IO or 60 mg IM.¹³ If pain continues after ketorolac (Toradol) (or if allergic), administer morphine sulfate as indicated above in accordance to patient's pain level. Treat nausea as indicated above. <p><u>Non-specific</u>¹² <u>complaints of pain for which a narcotic is not indicated or is refused by the patient.</u></p> <ol style="list-style-type: none"> All pain scores: Administer ketorolac 	<p><u>For abdominal pain or non-traumatic musculoskeletal pain</u>⁹</p> <ol style="list-style-type: none"> Pain rated at 4-6: Administer morphine sulfate 0.05 mg/kg IV/IO/IM. Pain rated at 7-10 that correlates with clinical presentation: Administer morphine sulfate 0.1 mg/kg IV/IO/IM. Maximum initial dose 10 mg. May repeat every 10-15 minutes as needed to a maximum total dose of 20 mg. Contact Medical Control for doses exceeding 20 mg.

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ADULT	PEDIATRIC (less than 60 kg)
<p>(Toradol) 30 mg IV/IO or 60 mg IM.¹³</p> <p>2. Treat nausea as indicated above.</p> <p><u>For suspected renal colic</u></p> <ol style="list-style-type: none"> 1. Administer ketorolac (Toradol) 30 mg IV/IO or 60 mg IM. 2. May repeat IV/IO dose once in 10-15 minutes. IM dose may not be repeated. 3. If pain continues after ketorolac (Toradol) (or if allergic), administer morphine sulfate as indicated above in accordance to patient's pain level. <p><u>Non-narcotic options for all sources of pain.</u></p> <ol style="list-style-type: none"> 1. Administer acetaminophen (Tylenol) 500mg if < 70kg, 1,000 mg PO > 70kg OR 2. Administer ibuprofen (Motrin) 200 mg if <70 kg, 400 mg PO if > 70kg 3. Treat nausea as indicated above. 	

DOCUMENTATION KEY POINTS

- Pain intensity, location, type, and duration. "OPQRST".
- Vital signs before and after administration of all narcotics.
- Medications administered and subsequent pain scales. It is recommended that the final pain score be assessed upon arrival to the hospital but prior to unloading the patient from the ambulance.
- If narcotics or sedatives are not indicated in a patient with complaint of pain (Care Plan or psychological issue) then document "Not Indicated" in the pain assessment intervention.
- Non-pharmacological interventions performed.
- Reason for anti-emetic and effect of the medication.
- Initial and ongoing assessments, monitoring, interventions, patient response, and complications (if any) encountered.

NOTES

¹ All patients have the right to safe and effective pain management regardless of cognitive and physical abilities, culture, age, and gender.

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² Do not administer homeopathic (less than therapeutic) doses of narcotics or sedatives to “pacify” manipulative patients.

³ Wong-Baker FACES Pain Scale: Correlate the report scale with the patient’s clinical presentation. Treat the patient, not the pain score,



⁴ FLACC Pain Scale: Correlate the report scale with the patient’s clinical presentation. Treat the patient, not the pain score,

Categories	Scoring		
	0	1	2
FACE	No particular expression or smile	Occasional grimace or frown, withdrawn, disinterested.	Frequent to constant quivering chin, clenched jaw.
LEGS	Normal position or relaxed.	Uneasy, restless, tense.	Kicking, or legs drawn up.
ACTIVITY	Lying quietly, normal position moves easily.	Squirming, shifting back and forth, tense.	Arched, rigid or jerking.
CRY	No cry, (awake or asleep)	Moans or whimpers; occasional complaint	Crying steadily, screams or sobs, frequent complaints.
CONSOLABILITY	Content, relaxed.	Reassured by occasional touching hugging or being talked to, distractable.	Difficulty to console or comfort

⁵ When administering pain medications, consider the following:

- In the absence of shock, pain should be treated according to standing guidelines. Contact Medical Control for advice if needed. Opiates alone, in recommended doses, will not cause significant hypotension.
- Use caution when administering narcotics to intoxicated patients as the alcohol may potentiate adverse effects.
- Reduce the dose of opiates by 50% of those over 65 years of age
- Reduce the dose of opiates by 50% when also administering a benzodiazepine.
- Use caution when administering narcotics to the elderly with significant co-morbid conditions as they may cause more sedation. Consider administering half the recommended dose or titrating the administration of 2-4 minutes to avoid adverse effects.
- The preference for administration route is IN (when available), IV, IO, and IM in that order.
- If the patient is allergic to **fentanyl (Sublimaze)** it is acceptable to administer **morphine sulfate**. The reverse is also acceptable.
- Maximize the dosing of one opiate before switching to another.
- Burn patients may require larger than usual doses of opiates for pain control. Contact the receiving facility for orders if needed. Consider administration of **lorazepam (Ativan)** for co-existing anxiety.

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- ⁶ **Fentanyl (Sublimaze)** is the preferred medication for fast acting, short duration pain relief. Administer **fentanyl (Sublimaze)** intranasally as soon as reasonably possible (even before IV is established) to attain faster pain relief.
- ⁷ **Nitroglycerin** is not a pain medication. Administer the appropriate amount of **fentanyl (Sublimaze)** for suspected acute coronary syndrome.
- ⁸ Intranasal administration is preferred over IM due to more rapid onset.
- ⁹ **Morphine sulfate** is the preferred medication for deeper pain relief, muscular type pain, abdominal pain, headache, narcotic withdrawal and chronic opiate users.
- ¹⁰ Patients with musculoskeletal spasm may be given **lorazepam (Ativan)** along with (not mixed in the same injection) a narcotic. Use half the usual dose of narcotic in these instances.
- ¹¹ Only indicated for the treatment of patients with chronic headache history. Do not administer ketorolac and/or morphine sulfate to patients suspected of stroke or with altered mental status.
- ¹² Do not administer **ketorolac (Toradol)** to persons with injuries or conditions for which surgery is anticipated (e.g. obvious fractures, suspected intra-abdominal bleeding, acute onset headache).
- ¹³ Administer half the recommended dose for patients over the age of 65.