

P-14 Pediatric Pain Management

BLS Treatment

Assess Pain Severity: Utilize a combination of pain scale, MOI, circumstances, and injury/illness
Oxygen: Titrate to SpO2 > 94%
Positioning: Position of comfort
Splinting: Splint injured body part as needed
Cold Pack or Heat Pack: Apply as needed

ALS Treatment

IV/IO
 If indicated by patients clinical condition or needed for medication administration.

No **Acute moderate or severe pain?** Yes

Non-Acute or Mild Pain

Moderate or Severe Pain

Acetaminophen 15 mg/kg PO
 Max total dose 1000 mg.
OR
Acetaminophen 15 mg/kg IV/IO
 Slow infusion IV/IO over 10 – 15 min.
 Max total dose 1000 mg.
OR
Ketorolac 0.5 mg/kg IV/IO/IM
 Single dose only.
 Max dose 15 mg.

Fentanyl 1 mcg/kg IV/IO/IM
 Slow push over 1 min for IV/IO.
 May repeat in 5 min.
 Max single dose 50 mcg.
 Max total dose 200 mcg.
OR
Fentanyl 2 mcg/kg IN
 Separate dose ½ per nostril.
 May repeat in 10 min.
 Max single dose 50 mcg.
 Max total dose 200 mcg.

Ketamine 0.3 mg/kg IV/IO
 Inject dose into 100 mL NS or D5W.
 Slow infusion over 10 – 15 min.
 Max total dose 30 mg.

Approximate Dosing Chart

Concentration: 50 mg/1 mL

Weight	Dose	Volume
10 kg	3 mg	0.06 mL
20 kg	6 mg	0.12 mL
30 kg	9 mg	0.18 mL
40 kg	12 mg	0.24 mL

Consider Moderate Pain Treatment
 For worsening pain or pain not improving with previous treatments.

For Continued Pain Consider Acetaminophen 15 mg/kg IV/IO
 Slow infusion over 10 – 15 min.
 Max total dose 1000 mg.

For Continued Pain Consider Acetaminophen 15 mg/kg IV/IO
 Slow infusion over 10 – 15 min.
 Max total dose 1000 mg.

Contact Base Hospital
 For additional pain management consultation.



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Pediatric Pain Management

Medication Notes / Contraindications

- **BLS pain management** methods should include reassurance, adjusting position of comfort, ice or heat if needed, and gentle transport.
- **Analgesic medications** should be considered by ALS providers for all patients complaining of pain. Use caution for any patient < 4 yo or > 65 yo, consider lower medication doses and closer monitoring.
- **Infusions should utilize a 10 drops/mL set** and target a total infusion time of 10 - 15 min.
- **Protocol guidelines** cannot replace sound clinical judgement and every patient deserves to have their pain managed appropriately. Consider all circumstances to form a complete treatment plan.
- **Determine accurate weight**, utilize a Length Based Resuscitation Tape (LBRT) or similar device.
- **Contact Base Hospital** when considering administration of Ketamine or Ketorolac for any patient < 4 yo.

Acetaminophen

- **Contraindications:**
 - Allergy or unable to take Acetaminophen
 - Hypotension
 - Acetaminophen taken > 3 times within 24 hrs
 - Liver disease/insufficiency/transplant
- **Discontinue infusion if hypotension develops.**

Fentanyl

- **Contraindications:**
 - Allergy or unable to take opiate medication
 - Hypotension
 - Respiratory insufficiency
 - GCS < 14 or suspected TBI
- **Cardiac monitoring with SpO2 and EtCO2 required if 2 or more doses administered.**
- **Respiratory depression and hypotension from opiates can be reversed with naloxone.**

Ketamine

- **Contraindications:**
 - Allergy or unable to take Ketamine
 - Pregnancy
 - Chest pain of cardiac origin
- **Cardiac monitoring with SpO2 and EtCO2 required during administration.**
- **Immediately label the Ketamine infusion after injecting selected dose into NS or D5W.**
- **Contact Base Hospital: For any patient < 4 yo.**

Ketorolac

- **Contraindications:**
 - Allergy or unable to take NSAID medication
 - > 65 yo
 - Pregnancy
 - Active bleeding
 - Multi-system trauma
 - GCS < 14 or suspected TBI
 - Asthma, GI bleeding, ulcers
 - Current use of anticoagulants or steroids
 - Kidney disease/insufficiency/transplant
- **Contact Base Hospital: For any patient < 4 yo.**

