CRUSH INJURY - PEDIATRIC

ALS STANDING ORDERS:
The following orders apply to crush injury of muscular regions of the legs, pelvis, arms, and shoulders and do not apply to isolated crush injuries of hands or feet. Treat hand or foot crush injuries as isolated skeletal fractures.

1. Obtain pulse oximetry; if room air oxygen saturation less than 95%, administer:
   - High flow oxygen by mask or nasal cannula at 6 l/min flow rate as tolerated.

2. IV/IO access in unaffected limb and administer:
   - Normal Saline 20 mL/kg bolus (maximum 250 mL), prior to release of compressing force.

3. For signs of hypovolemia or poor perfusion;
   - Administer a second Normal Saline 20 mL/kg bolus (maximum 250 mL), may repeat a third 20 mL/kg bolus to attain or maintain perfusion.

4. For possible hyperkalemia due to crush injury of muscle tissue:
   - Albuterol, Continuous nebulization of 6.0 mL (5 mg) concentration as tolerated.

5. If crush injury duration greater than one (1) hour:
   - Sodium bicarbonate (NaHCO3) 1 mEq/kg IV/IO.

6. For severe pain, with systolic BP > 80:
   - Morphine sulfate: 0.1 mg / kg IV/IM, may repeat once for continued pain (maximum 5 mg).
   OR,
   - Fentanyl 2 mcg/kg IN/IV/IM, may repeat once after 3 minutes for continued pain (maximum dose 100 mcg)


8. Non-compressive splints; for bleeding control use direct pressure, hemostatic dressing, or tourniquet.

9. ALS escort, contact Base Hospital or Pediatric Resource Center (CCERC) for appropriate destination.