**H45. Sodium Bicarbonate**

**Class and Action:** Buffer, alkalinizing agent, electrolyte supplement; reacts with hydrogen ions to form water and carbon dioxide and can thus act to buffer metabolic acidosis.

**Indications:** Acidosis, long resuscitation, unwitnessed arrest, tricyclic antidepressant or aspirin overdose, severe DKA

**Contraindications:** Alkalosis abdominal complaint of unknown origin, electrolyte imbalance, severe pulmonary edema.

**Side Effects:** Alkalosis, hypoxia, electrolyte imbalance, seizures, necrosis at injection site.

**Drug Interactions:** Precipitates with several medications, vasopressors maybe deactivated when administered with Sodium Bicarb.

**Onset, Duration, and Routes:** Onset is within 2-10 minutes with a duration or 30-60 minutes. Routes of administration include IV or IO

**Adult Dose:**
- Tricyclic Antidepressant Overdose 1-2 mEq/kg
- Crush Injury before extrication 50 mEq over 5 minutes IV/IO
- Crush Injury after extrication with signs of hyperkalemia 50 mEq IV/IO over 5 minutes
- Crush Injury after extrication with signs of hyperkalemia and no pulse 50 mEq IV/IO

**Pediatric Dose:**
- Tricyclic Antidepressant Overdose 1-2 mEq/kg
- Crush Injury before extrication 1 mEq/kg max 50 mEq over 5 minutes IV/IO
- Crush Injury after extrication - contact medical control

**WDM EMS Protocols:**
- C9. Overdose
- F2. Crush Injury

**Special Considerations:**