# 16MM – SODIUM BICARBONATE

**PARAMEDIC**

**Class:** Alkalinizing agent

**Actions/Pharmacodynamics:** Raises the pH of blood by buffering excess hydrogen ions that are present in acidotic states. The role of sodium bicarbonate is limited in cardiac arrest. Because ventilation is an effective tool in managing respiratory acidosis, sodium bicarbonate should rarely be administered for cardiac arrest, unless the arrest is suspected to be secondary to hyperkalemia or a tricyclic antidepressant over ingestion.

**Indications:**
Specific Causes of Cardiac Arrest (Hyperkalemia) (4I)
Poisonings – General Management (Tricyclic Antidepressant) (8A)
Dialysis-Related Issues (Hyperkalemia) (9E)
Crush Injury Syndrome (Hyperkalemia Prophylaxis) (10K)

**Contraindications:** Known metabolic alkalosis.

**Pharmacokinetics:** Onset of effect is observed within 3-5 minutes after IVP/IOP administration.

**Side Effects:** Sodium bicarbonate may inhibit oxygen release secondary to a shift in oxyhemoglobin saturation. It also may produce a paradoxical acidosis that can depress cerebral and cardiac function. Severe soft tissue damage can occur in extravasated administrations.

**Dosage:**
**Specific Causes of Cardiac Arrest – Hyperkalemia - Adult & Pediatric (4I)**
**Poisonings – General Management – Tricyclic Antidepressants - Adult & Pediatric (8A)**
**Dialysis-Related Issues – Hyperkalemia - Adult & Pediatric (9E)**
**Crush Injury Syndrome – Hyperkalemia Prophylaxis - Adult & Pediatric (10K)**
1 mEq/kg IVP/IOP with maximum dose of 50mEq

**How Supplied:**
50 mEq/50 mL (1 mEq/mL) prefilled syringe.
(Always check concentration and dose per container at time of patient medication administration)

**Special Comment:** Do not administer with calcium chloride. A precipitate will form and obstruct the vascular access being utilized.