

**CLASS A: Cardiac Arrest/Poisoning, Hydrogen Cyanide, Tricyclic Antidepressant OD, Hyper K, Crush injury**

**PROTOCOL(S) USED IN: Cardiac Arrest protocols, Crush Injury/Entrapment, Hyperkalemia, Poisoning & Overdose, Hydrogen Cyanide Exposure**

**PHARMACOLOGY AND ACTIONS:**

- A. A buffer solution which transiently increases serum bicarbonate levels to neutralize acidosis
- B. High concentration sodium solution to counteract the effects of sodium channel toxicity from TCAs and similar medications/toxins.

**INDICATIONS:**

- A. To treat wide complex arrhythmias in:
  - a. Tricyclic Antidepressant OD
  - b. Suspected Hyperkalemia
  - c. Sodium Channel Blocker OD/effect
- B. Suspected Hyperkalemia

**SIDE EFFECTS AND NOTES:**

- A. Should not be infused concurrently with catecholamine or calcium. Use separate line or separate with saline flush.
- B. Sodium bicarbonate has not been shown to improve cardiac arrest outcomes and should not be used indiscriminately except in cases of suspected cardiac arrest secondary to TCA overdose or hyperkalemia.

**ADULT DOSING:**

**Cardiac arrest- 1 mEq/kg IV/IO initially followed by 0.5mEq/kg every 10 minutes**

**Tricyclic Overdose- 1 mEq/kg IV/IO**

(If patient exhibits arrhythmias or a widening QRS complex)

**Hyper K/Crush Injury- 50 mEq IV/IO.**

**PEDIATRIC DOSING:**

All Indications: **1 mEq/kg IV/IO**