

CLASS A: Cardiac Arrest/Poisoning, Hydrogen Cyanide, Tricyclic Antidepressant OD

CLASS B: 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. Contact OLMC

PEDIATRIC DOSING:

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