HEALTHEAST MEDICAL TRANSPORTATION MEDICAL OPERATIONS MANUAL

SODIUM BICARBONATE

Drug Classification: Electrolyte

BACKGROUND

Pharmacodynamics

Sodium bicarbonate elevates the blood pH promptly and is reabsorbed through normal kidney function.

Indications

- Prolonged arrest with good ventilation of patient
- Pre-existing acidosis or hyperkalemia
- Excited delirium
- Tricyclic antidepressant overdose
- Crush injuries with prolonged extrication

Contraindications

• None in the prehospital setting

Cautions

- May cause hypernatremia and hyper osmolality
- May precipitate with epinephrine and calcium chloride/gluconate if tubing is not flushed between drugs.

DOSAGE and ADMINISTRATION

ADULT	PEDIATRICS (less than 60 kg)
Excited Delirium	Excited Delirium
Mix 100 mEq in 1-liter normal saline and infuse wide open to treat acidosis.	Contact medical control.
If cardiac arrest develops administer 100 mEq IV push.	Hyperkalemic Arrest 1. Administer 2 mEq/kg IV/IO.
Hyperkalemic Arrest	Crush Injuries with Prolonged Extrication
1. Administer 2 amps IV/IO.	1. 100 mEq mixed with 1-liter normal saline at a rate of 200 mL/hour.
Crush Injuries with Prolonged Extrication	
1. 100 mEq mixed with 1-liter normal saline at a rate of 200 mL/hour.	For all other indications 1. Administer 1 mEq/kg IV/IO.

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ADULT	PEDIATRICS (less than 60 kg)
For all other indications	
1. Administer 1 mEq/kg IV/IO.	

ADVERSE REACTIONS/SIDE EFFECTS

• Hypernatremia, hyperosmolality, hypokalemia, hypocalcemia

NOTES

REFERENCE GUIDELINE:

2D PEA/Asystole

2E Hyperkalemic Arrest

3J Behavioral Emergencies

3K Overdose

4A Trauma