FORMULARY

Sodium Bicarbonate 8.4%

Class of Drug	Buffer, alkalinizing agent
Mechanism of Action	Reacts with hydrogen ions to form water and carbon dioxide thereby acting as a buffer for metabolic acidosis
Indications	Hyperkalemia TCA overdose Phenobarbital overdose Known pre-existing bicarbonate-responsive acidosis Upon ROSC after long arrest interval (draw labs first) Alkalinization for treatment of specific intoxications
Contraindications	Metabolic and respiratory alkalosis Hypocalcemia and hypokalemia Hypochloremia secondary to GI loss and vomiting Do not administer in the same IV line as calcium containing solutions (precipitate)
Adverse Effects	Metabolic alkalosis, hypokalemia, hyperosmolarity, fluid overload Increase in tissue acidosis Electrolyte imbalance and tetany, seizures Tissue sloughing at injection site if extravasation occurs
Precautions	Vasopressors may be deactivated Must ventilate patient after administration Intracellular acidosis may be worsened by production of carbon dioxide May worsen CHF
Dosing/Administration	Adult: Metabolic Acidosis: 2-5 mEq (one dose only, base subsequent doses on lab values) ASA and TCA Overdose: 1-2 mEq/kg (one dose only, base subsequent doses on lab values) Pediatric: Metabolic Acidosis: 1 mEq/kg may repeat with 0.5 mEq/kg every 10 minutes ASA and TCA Overdose: 1 mEq/kg may repeat with 0.5 mEq/kg every 10 minutes
Pregnancy Category	**Class C** Uncertain safety – animal studies show adverse effect but no human studies exist