

SCOPE: ALS, CCT	
<b>MEDICATION:</b>	<b>SODIUM BICARBONATE</b>
<b>INTERVENTION:</b>	<p><u>Classification:</u> Alkalinizing agent/Electrolyte</p> <p><u>Actions:</u> Neutralizes hydrogen ion concentration and raises blood and urinary pH reversing acidosis.</p> <p><u>Contraindications:</u></p> <ul style="list-style-type: none"> <li>• Alkalosis</li> <li>• Hyponatremia</li> <li>• Severe pulmonary edema</li> <li>• Hypocalcemia</li> <li>• Unknown abdominal pain</li> </ul> <p><u>Precautions:</u></p> <ul style="list-style-type: none"> <li>• Extravasation: tissue necrosis may occur due to hypertonicity</li> <li>• Use with caution in the elderly, patients with cirrhosis, edema, heart failure, peptic ulcer disease and renal impairment</li> <li>• Pediatric: Rapid administration in neonates, infants, and children &lt;2 years of age has led to hyponatremia, decreased CSF pressure, and intracranial hemorrhage</li> <li>• <b>PREGNANCY RISK FACTOR: C</b></li> </ul> <p><u>Dosage:</u></p> <ol style="list-style-type: none"> <li>I. <u>Hyperkalemia (i.e Crush Injury):</u> <ol style="list-style-type: none"> <li>a. Adult:           <ol style="list-style-type: none"> <li>i. IV/IO: 1 mEq/kg (50mEq minimum) immediately prior to release, IV push over 5 minutes, repeat once in 15 minutes &amp; follow with IV infusion of 2 amps in a liter of D5W               <ol style="list-style-type: none"> <li>1. Optional infusion: 50-100 mEq in 1000ml NS, infusion rate appropriate to age</li> </ol> </li> </ol> </li> <li>b. Pediatric:           <ol style="list-style-type: none"> <li>i. IV/IO: 1 mEq/kg over 5-10 mins</li> </ol> </li> </ol> </li> <li>II. <u>Organophosphate Poisoning with widening QRS or ventricular arrhythmia:</u> <ol style="list-style-type: none"> <li>a. Adult/Pediatric:           <ol style="list-style-type: none"> <li>i. IV/IO: 1mEq/kg rapid IV push</li> </ol> </li> </ol> </li> <li>III. <u>Neonatal Metabolic Acidosis</u> <ol style="list-style-type: none"> <li>a. Neonate:           <ol style="list-style-type: none"> <li>i. IV: 2 mEq/kg</li> </ol> </li> </ol> </li> </ol> <p><u>Onset of Action:</u> Rapid</p> <p><u>Duration:</u> 8-10 minutes</p> <p><u>Adverse Effects:</u> Exacerbation of cardiac failure, edema, cerebral hemorrhage, intracranial acidosis, hyponatremia, hypocalcemia, hypokalemia, metabolic acidosis, milk-alkali syndrome, abdominal distention, eructation, tetany, pulmonary edema</p>

If this is a patient care policy, the information contained herein is used to provide guidance in the care of patients, but should not, and does not replace or preclude the use of clinical judgment.

<i>FOR OFFICE USE ONLY</i>	
Originator:	Original Date:
Revised Date:	
Effective Date: 06/01/18	Page 1 of 2

	<u>Special Considerations:</u>
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|  | <ol style="list-style-type: none"><li>I. Use of IV NaHCO<sub>3</sub> should be reserved for documented metabolic acidosis and for hyperkalemia-induced cardiac arrest. Routine use in cardiac arrest is not recommended</li></ol> |
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