

Initial Date: 07/19/2023
Revised Date: 12/10/2025

Section: 9-41R

Sodium Bicarbonate

Pharmacological Category: Alkalinizing Agent; Antacid; Electrolyte Supplement,

Indications:

1. Cardiac arrest in dialysis patient with suspected hyperkalemia
2. Symptomatic tricyclic antidepressant overdose
3. Hyperkalemia

Contraindications:

1. Severe pulmonary edema
2. Known Alkalosis

Precautions:

1. Must flush IV line between medications
 - a. Calcium and epinephrine are not compatible with sodium bicarbonate
2. Administer slowly

Dosing: POSIONING/OVERDOSE/ENVIRONMENTAL EXPOSURE GENERAL CRUSH INJURY

Indication: symptomatic tricyclic antidepressant ingestions (tachycardia, wide complex QRS)

Adults administer:

1. Sodium bicarbonate 50 mEq IV. Repeat as needed

Pediatrics administer:

1. Sodium bicarbonate according to MI MEDIC cards.
2. If MI MEDIC cards are not available administer Sodium bicarbonate 1 mEq/kg IV.
Repeat as needed

Dosing: ADULT CARDIAC ARREST

Indications: Cardiac arrest with known or highly suspected tricyclic antidepressant overdose or known or highly suspected hyperkalemia (e.g., dialysis patient, EKG changes)

Adults administer:

1. Sodium bicarbonate 1 mEq/kg IV/IO

Dosing: PEDIATRIC CARDIAC ARREST

Indication: Cardiac arrest with hyperkalemia (renal failure)

Pediatrics administer:

1. Sodium bicarbonate according to MI MEDIC cards
2. If MI MEDIC cards are not available administer Sodium bicarbonate 1 mEq/kg IV/IO

Used in the Following Protocols:

Poisoning/Overdose/Environmental Exposure (Section 2 Trauma and Environmental)

General Cardiac Arrest (Section 5 Adult Cardiac)

Pediatric Cardiac Arrest – General (Section 6 Pediatric Cardiac)