

CRITICAL DRUG SHORTAGE ALERT!!!

Sodium Bicarbonate for Injection

The issue: Nationwide shortage of sodium bicarbonate for injection in all formats. NH inventories are depleting and further conservation measures must be implemented IMMEDIATELY.

<http://www.healthycanadians.gc.ca/recall-alert-rappel-avis/hc-sc/2017/63654a-eng.php>

Practice Implications*: Existing inventories of sodium bicarbonate for injection **ARE RESERVED for CRITICAL CASES ONLY**. Sodium bicarbonate injection in general wardstock locations, excluding OR, ER and ICU, will be removed. This will assist with maintaining stock for use in crash trays and carts. Recommended alternative therapies provided below.

Note: sodium bicarbonate 325 mg and 500 mg tablets, and sodium acetate 4 mEq/mL x 50 mL injection are available (contact the nearest hospital pharmacy).

Indication	Recommendation*	Key Points
Urinary alkalization to enhance drug elimination (e.g. overdoses)	Contact BC DPIC (1-800-567-8911) for assistance ; sodium acetate may be an appropriate substitute	Evidence to support use of sodium bicarbonate is limited for most agents
Rhabdomyolysis	Aggressive resuscitation with 0.9% NaCl	Sodium bicarbonate offers no significant improvement over aggressive fluid resuscitation with 0.9% NaCl.
Prevention of contrast induced nephropathy in those at risk	0.9% NaCl 1 mL/kg/hr for 6-12 hrs pre and 6-12 hrs post procedure For emergent procedures: 0.9% NaCl 3 mL/kg bolus followed by 1 mL/kg/hr for 6-12 hours post-procedure	Use of sodium bicarbonate is associated with mixed results: studies have differing therapeutic endpoints Minimize modifiable risks such as concomitant nephrotoxins
"Buffering" lidocaine to decrease injection pain	Do not use. Inject slowly and with a fine needle instead.	Not an essential use
Hyperkalemia (acute management)	Insulin regular 10 units IV with 50% dextrose 50 mL IV +/- inhaled beta-2 agonists	Sodium bicarbonate therapy should only be used if severe metabolic acidosis is present.
Sepsis-induced acidosis	Sodium bicarbonate is not recommended in patients with pH greater than or equal to 7.15	Studies do not support the hypothesis that sodium bicarbonate enhances catecholamine effectiveness Treat underlying shock and/or source of acidemia
Diabetic ketoacidosis	Sodium bicarbonate is not recommended	Treat underlying ketogenesis

References: Society of Critical Care Medicine Drug Shortages Alert – September 2016

<http://www.learnicu.org/Lists/Web%20Contents/Attachments/14258/Drug-Shortages-Alert-9-16.pdf>

American Society of Hospital Pharmacy Drug Shortage Alert – May 26, 2017

<https://www.ashp.org/Drug-Shortages/Current-Shortages/Drug-Shortage-Detail.aspx?id=788#>

*Alternates are provided for clinical information and may not be relevant in all clinical situations

Date: June 19, 2017	
Medication Change	
Recall	
Drug Shortage	✓
Formulary Changes	

For the information of: physicians, nurses, pharmacists

For further information contact:
Gordon Harper
Medication Use Management
Pharmacist (778-349-3216)
Nancy Dyck
Medication Use Management
Pharmacist (250-261-7555) or
mumpharmacist@northernhealth.ca

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