



UNIFIED FIRE AUTHORITY

MEMORANDUM

24-037

March 12, 2024

TO: All Personnel

FROM: Division Chief Ayres

SUBJECT: Sodium Bicarbonate

Due to supply sourcing challenges, the Logistics Division will begin supplying vials of Sodium Bicarbonate instead of pre-loaded syringes. Each vial contains 50 mEq of Sodium Bicarbonate in 50 mL of solution (1 mEq per mL).



Each ambulance and heavy apparatus are required to stock 2 x 50 mEq vials on the apparatus to meet State supply requirements. Because Sodium Bicarbonate should only be used in rare circumstances (known tricyclic anti-depressant overdose, cardiac dysrhythmia strongly suspected secondary to hyperkalemia such as in a hemodialysis patient or suspect crush syndrome), stations should limit orders to maintain this minimum amount on each apparatus plus 2 x 50 mEq doses in the station supply. This will allow for restocking of an apparatus after a single use and then additional supplies should be ordered through Logistics on an as-needed basis. For reference, UFA EMS providers have administered sodium bicarbonate to 10 patients total in the last 360 days.

There are multiple studies over the past several years showing that Sodium Bicarbonate is not effective in improving out of hospital cardiac arrest survival, and some of those studies indicate that it can potentially cause harm by preventing native catecholamine release (epinephrine, norepinephrine, and dopamine) in full arrest patients. Despite being indicated in past editions of ACLS guidelines, it is no longer recommended and *should not be given* in a full arrest patient. Those studies are available on multiple platforms.

Please do not order large amounts of sodium bicarb to minimize medication expiration prior to use.

For any questions related to supply of Sodium Bicarbonate, please contact Pete Young, Logistics Division pyoung@unifiedfire.org.

For clinical questions related to the use of Sodium Bicarbonate, please contact Amanda Lawrence, EMS Division alawrence@unifiedfire.org.