



*** PARAMEDIC ALERT ***

No. 2010-04

Date: June 25, 2010

Topic: Medication Shortages

Effective: Immediately

Attention: All El Dorado County ALS Providers/Base Hospitals

Due to manufacturing and approval issues, prefill one (1) mg epinephrine syringes 1:10,000 are on back order and are difficult to obtain. Prefills of Dextrose 50% and even vials of Dextrose are difficult to obtain as well. Shipments are expected by the end of June 2010, but there is no guarantee.

If you do not have Epinephrine prefills for use, please follow these procedures for dilution of Epinephrine to obtain 1:10,000 concentrations for use in cardiac arrest:

- Draw up one (1) mg of Epinephrine from an Epinephrine 1:1,000 ampule. This is one (1) mL of volume
- Add to the Epinephrine nine (9) mL of normal saline from a vial or the IV line
- The resulting ten (10) mL solution may be used in place of a prefill

Epinephrine is a high alert medication and may cause significant patient harm when used in error; the following steps should be followed to minimize the potential for error.

- Have another crew member confirm the dilution
- Do not save the solution or prepare it in advance
- Use of the one mg ampule is recommended, but one mL from a 30 mL Epinephrine vial of 1:1,000 concentration may be used if necessary. If so, make certain only one mL of the Epinephrine solution is used
- It is better if you always prepare the dilution using the same source of Epinephrine to avoid confusion

If you have multidose vials of Epinephrine, make sure you DO NOT draw up nine (9) mL of Epinephrine solution. It is recommended that the Epinephrine solution for dilution and normal saline should be kept together in a clear plastic "baggie" with a label on the Epinephrine that says one mL use, along with the 10 mL syringe and brief instructions for dilution.

If intravenous (IV) Epinephrine is needed in the anaphylaxis patients while solution dilution is being used, the Base Hospital MICN should confirm with the field crew the correct dilution and the correct dose in mL and milligrams.

Dextrose 50% in vials may be administered if there is a shortage of prefills. If there is nbo Dextrose available, use Glucagon according to the treatment guidelines.

Please contact the Emergency Medical Services Agency with any questions or clarifications.

Thank you for your work in the EMS system.

David Brazzel, MD
Medical Director, El Dorado County EMS Agency