



## *EMS Special Memorandum - #10-002*

Date: August 16, 2010

To: Mendocino/Napa/Sonoma County EMS Providers  
Mendocino/Napa/Sonoma County Fire Agencies  
Mendocino/Napa/Sonoma EMS Dispatch Centers

From: Bryan Cleaver  
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Regional EMS Medical Director

Re: **Acceptable Substitutions for Unavailable Medications**

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This Special Memo is intended to provide guidance to ALS Providers affected by the wide-spread shortage of some medications; particularly 50% Dextrose (D50) and Epinephrine 1:10,000 in preloaded syringes. Should either of these medications become unavailable through suppliers and alternate vendors the following substitutions are authorized.

### **Epinephrine 1:10,000:**

**ALS Providers should dilute 1mL of Epinephrine 1:1,000 with 9 mL Normal Saline to achieve 10 mL of the 1:10,000 concentration.** The Epinephrine 1:1,000 is supplied commonly in 1 mL ampoules or in 30mL vials. Provider agencies may use either packaging, although the risk of over dosage is substantially less with the 1mL packaging, while the glass ampoules require the usage of a filter needle as an added step in the process. Normal Saline is available in vials or may be drawn from an IV bag if available.

### **D50:**

**ALS Providers may substitute 250mL of 10% Dextrose (D10) in place of D50. The fluid should be administered rapidly and accompanied by the co-administration of Glucagon for patients with altered mental status and suspected hypoglycemia.** In order to conserve supplies of D50, it is the EMS Agency recommendation that patients with normal mentation that can **safely** be treated with oral glucose receive that treatment first. IV Dextrose should be reserved for patients experiencing significant hypoglycemia and/or for whom the oral preparation is contraindicated.