




EMS Information Bulletin 2022-11

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SUBJECT: Use of 5% dextrose and clinical alternatives to dextrose shortage

TO: EMS agencies with ALS and IALS services, paramedics, AEMTs, and regions

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The Bureau of EMS is aware of a national shortage of dextrose solutions of various concentrations. Our Statewide ALS and AEMT Protocols and the corresponding state medication list provide options for treating hypoglycemia with dextrose in concentrations between 10 and 50%. Many agencies recently favor the use of 10% dextrose as the safer and more effective option for treating hypoglycemia.

There is currently a national shortage of dextrose in many concentrations, and this EMSIB outlines options for EMS agencies to ensure that there is a continued ability to treat hypoglycemia. The following apply to EMS agencies that have difficulty obtaining dextrose solutions:

- 1) Before instituting steps below, EMS agencies should first check with multiple pharmaceutical vendors and obtain any dextrose solution in the concentrations between 10-50% to comply with the Statewide ALS/AEMT Protocols and state required medication list as written.
- 2) If unable to obtain any concentration of dextrose between 10-50%, EMS agencies may consider the following:
 - a. Use 5% dextrose solution for the treatment of hypoglycemia. **By way of this EMSIB, the Bureau of EMS permits alteration of hypoglycemia care in the Statewide ALS/AEMT Protocols by substituting 250-500 mL (or 10 mL/kg**

for children) of rapidly infused 5% dextrose in place of other concentrations.

Caution should be used, and medical command should be contacted if a patient has symptoms of fluid overload and may not tolerate this volume of fluid.

- b. If no dextrose is available between 5-10% solutions, agencies should consider stocking and using the optional glucagon formulations and dosing provided in the protocols.
- 3) EMS agencies with a stock of dextrose solutions that are nearing expiration can consider applying for a waiver to extend the expiration date for these solutions. Agencies must apply to the Bureau of EMS for such waivers through their local EMS regional councils. EMS agencies must follow the rules for requesting an expiration date waiver as outlined in EMS Information Bulletin 2017-17
- 4) EMS agencies that receive their medication stocks through hospital or health system pharmacies should ask to be considered for priority if stocks of 10-50% dextrose are low. The hospitals have additional options that are not available to EMS, and it is reasonable to consider prioritizing remaining stocks of dextrose in these concentrations to EMS to decrease the chance of medication error.