

Monterey County EMS System Policy



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EPINEPHRINE FOR HYPOTENSION (“PUSH-DOSE” EPINEPHRINE)

I. PURPOSE

- A. To define the indications and procedure for the use of epinephrine to manage persistent hypotension refractory to other treatments.

II. POLICY

- A. Epinephrine for persistent hypotension is a standing order for those conditions as authorized in Monterey County EMS protocols.
- B. Epinephrine for persistent hypotension requires a base hospital physician order for patients with persistent hypotension from conditions not found in Monterey County EMS field treatment protocols.
- C. For the purpose of push-dose administration for treatment of persistent hypotension, prefilled ampules of 1:10,000 epinephrine **must** be diluted with Normal Saline in accordance with the procedure detailed below. Administering undiluted 1:10,000 or 1:1,000 epinephrine IV or IO can cause stroke, heart attack, or cardiac arrest.
- D. **NEVER** prepare push-dose epinephrine by attempting to dilute an ampule of 1:1,000-concentration epinephrine.
- E. The 10 mL syringe with the epinephrine and saline mixed shall be immediately labeled with the pre-made label established by the EMS Agency.

III. PROCEDURE

- A. Treat the patient using the appropriate protocol for the patient’s condition.
- B. Establish patent IV or IO access.
- C. Open a preloaded ampule of 1:10,000 epinephrine (1 mg of epinephrine in a preloaded 10-mL ampule). Remove the yellow plastic cap from the ampule. Do not attach the ampule to the Luer-Jet syringe that comes in the pre-packaged box.
- D. Using an empty 10-mL syringe with an attached 18-gauge needle, insert the needle through the blue stopper of the 1:10,000 epinephrine ampule and draw up 1 mL of 1:10,000 epinephrine from the preloaded ampule.
- E. Using the same 10-mL syringe (which now contains 1 mL of 1:10,000 epinephrine), draw up 9 mL of Normal Saline from a bag of Normal Saline. (Do not inject the epinephrine into the bag of Normal Saline.)

- F. Mix the epinephrine and Normal Saline by vigorously shaking the syringe. Attach an orange-colored label to the syringe identifying the contents as “Epinephrine (10 mcg/mL)”.
- G. Attach the bag of Normal Saline to the IV or IO line and infuse Normal Saline at a rate appropriate for the patient’s condition.
- H. Using the labeled syringe containing dilute epinephrine (10 mcg/mL concentration), administer 0.5 - 1 mL (5-10 mcg) IV/IO every 2-5 minutes as needed to maintain a systolic BP greater than or equal to 90 mmHg.
- I. Document the time and dosage of each administration of epinephrine.
- J. Re-check and document the patient’s blood pressure every 2-3 minutes.

END OF POLICY