



Push-Dose Epinephrine for Hypotension

- Protocol -

Level: Intermediate/Paramedic

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Medics must be signed off by CRAT on Push-Dose Epinephrine administration before protocol application.

Indication:

- Systolic blood pressure <70mmHg or MAP <50mmHg

Contraindications:

- Hypovolemia must be corrected before pressor administration
- Sepsis requires aggressive fluid administration

Requirements:

- Patient is >17 years of age

Intervention:

- 10 micrograms (mcg) IV/IO every 1-5 minutes to maintain SBP >90mmHg.
 - This is 1mL of 10mcg/mL (1:100,000) epinephrine.

WARNING

- This concentration is not provided in the TJEMS drug box. You have to make it yourself. See Administration Notes. **Do not administer “cardiac epinephrine” (0.1mg/mL, 1:10,000) to a patient with a pulse.**

Adverse Effects (particularly if accidental overdose):

- Malignant hypertension
- Dysrhythmia
- Cardiac arrest

Administration Notes:

- Onset <1 minute. Duration ~5 minutes.
- At transfer of care, “Administered 10mcg of epinephrine as a push-dose pressor”

Mixing 10mcg/mL (1:100,000) epinephrine:

1. Take 1mg of cardiac epinephrine (0.1mg/mL, 1:10,000) and waste 9mL.
2. Into that syringe, withdraw 9mL of normal saline.
3. Invert to mix. Mixture now has 10mL of 10mcg/mL epinephrine

Further Reading:

These are for knowledge only. Protocols and administration instructions in these articles do not apply.

- PubMed: [Push-dose pressors for immediate blood pressure control](#)
- JEMS: [A Push for Push Dose Epinephrine](#)