# Epinephrine

**Medication Reference Card**

**NAPA COUNTY EMS AGENCY**

**Effective Date:** 01-01-2018  
**Revised Date:** 01-01-2020

## Indication
- Cardiac arrest (adult/pediatric)
- Pediatric Bradycardia
- Allergic reaction/anaphylaxis
- Respiratory Distress/Bronchospasm

## Contraindication
- Cocaine-induced VT
- Infusion with alkaline solutions

## Side Effects
- Anxiety
- Apprehensiveness
- Restlessness
- Tremors
- Weakness
- Dizziness
- Palpitations
- Headache

## Adult Dose
- **C-02:** Asystole/Pulseless Electrical Activity  
  - 1mg IV/IO q 3-5 min 1:10,000
- **C-03:** Ventricular Fibrillation/Pulseless Ventricular Tachycardia  
  - 1mg IV/IO q 3-5 min 1:10,000
- **C-04:** Symptomatic Bradycardia  
  - 10mcg/mL IV/IO every 1-3 minutes. Repeat as necessary to maintain a systolic blood pressure > 90mmHg. See mixing instructions for Push-Dose Epinephrine.
- **C-08:** Cardiogenic Shock  
  - 10mcg/mL IV/IO every 1-3 minutes. Repeat as necessary to maintain a systolic blood pressure > 90mmHg. See mixing instructions for Push-Dose Epinephrine.

## Pediatric Dose
- **M-03:** Respiratory Distress - Bronchospasm  
  - 0.3 mg IM 1:1,000. May repeat x 2 at 10 minute intervals as clinically indicated
- **M-07:** Allergic Reaction/Anaphylaxis  
  - 0.3 mg IM 1:1,000. May repeat x 2 at 10 minute intervals as clinically indicated
  - 0.1 mg IV/IO 1:10,000. May repeat once in 10 minutes as clinically indicated

## Pediatric
- See [Pediatric Medication Reference Cards (1:1,000)](#)
- See [Pediatric Medication Reference Cards (1:10,000)](#)
- See [Pediatric Cardiac Arrest Dosing Reference Cards](#)

## Caution
- High doses produce vasoconstriction and may compromise organ function
- Low doses may increase cardiac output with redirection of blood flow to skeletal muscles, producing decreased renal blood flow
- Myocardial O₂ requirements are increased
- Subcutaneous administration is not recommended for treatment of anaphylaxis because absorption is delayed

## Actions
- Increases heartrate and automaticity
- Increases cardiac contractile force.
- Increases myocardial electrical activity
- Increases system vascular resistance
- Increases blood pressure
- Causes bronchodilation
- **C-02**: Asystole/Pulseless Electrical Activity
- **C-03**: Ventricular Fibrillation/Pulseless Ventricular Tachycardia
- **C-04**: Symptomatic Bradycardia
- **C-08**: Cardiogenic Shock
- **M-03**: Respiratory Distress – Bronchospasm
- **M-07**: Allergic Reaction/Anaphylaxis

- **P-02**: Pediatric Asystole/Pulseless Electrical Activity
- **P-03**: Pediatric Ventricular Fibrillation/Pulseless Ventricular Tachycardia
- **P-04**: Neonatal Resuscitation
- **P-06**: Pediatric Symptomatic Bradycardia