

**CLASS: A****CLASS B: Asthma only (> 3 doses, >40 y/o, and/or pmhx of CAD)****PROTOCOL(S) USED IN:** Anaphylaxis, Cardiac Arrest protocols, Cardiac Dysrhythmias  
Bradycardia, Neonatal Resuscitation, Respiratory Distress**PHARMACOLOGY AND ACTIONS:**

- A. Catecholamine with alpha and beta effects.
- B. Increased heart rate, arterial blood pressure, systemic vascular resistance, automaticity, myocardial O<sub>2</sub> consumption and myocardial contractile force.
- C. Potent bronchodilator.

**INDICATIONS:**

- A. Ventricular fibrillation/Pulseless Ventricular Tachycardia
- B. Asystole
- C. Pulseless Electrical Activity
- D. Symptomatic Bradycardia
- E. Systemic allergic reactions, croup and epiglottitis
- F. Severe Asthma (> 3 doses, patients >40 years of age, and/or pmhx of CAD require OLMC)

**CONTRAINDICATIONS:****Use caution in patients with peripheral vascular insufficiency.****SIDE EFFECTS AND NOTES:**

- A. Anxiety, tremor, headache, tachycardia, palpitations, PVCs, angina and HTN
- B. Should not be added directly bicarbonate infusion; catecholamine may be partially deactivated by alkaline solutions.
- C. When used for allergic reactions, increased cardiac work may precipitate angina and/or MI in susceptible individuals.
- D. Wheezing in an elderly patient is considered pulmonary edema or pulmonary embolus until proven otherwise.

**ADULT DOSING:****Cardiac Arrest Dosing Options:**

- a. **1.0 mg (1:10,000) IV** every 3-5 minutes during arrest.
- b. May be given via ET at 2-2.5 times IV dose if IV and IO are unsuccessful.

**Allergic reaction, anaphylaxis shock, laryngeal edema, severe asthma:**

- a. **0.3 mg (1:1,000) IM**
- b. If diminished perfusion or shock symptoms present, give **0.3 mg (1:10,000) IV** over 30-60 seconds.

**Croup/Epiglottitis:****3 ml (1:1,000) via nebulizer****PEDIATRIC DOSING:****Cardiac Arrest -**

- a. **0.01 mg/kg (1:10,000) IV/IO** every 3-5 minutes

**Allergic reaction, anaphylaxis shock, severe asthma -**

- a. **0.01 mg/kg (1:1,000) IM** to max single dose of 0.3 mg
- b. If diminished perfusion/shock present, **0.01mg/kg IV/IO (1:10,000)**

**Croup/Epiglottitis-**In patients 6 months to 6 years of age with audible stridor at rest, give **3 ml Epinephrine 1:1,000 via nebulizer.**