

EPINEPHRINE 1:1,000 (Adrenalin®)**Classification:** Sympathomimetic agent (catecholamine)**Actions:**

1. Increases cardiac output due to increased inotropy, chronotropy, dromotropy, and AV conduction (*b1* effect)
2. Relaxes smooth muscles of the respiratory tract (*b2* effect)
3. Increases systolic blood pressure due to increased cardiac output (*b1* effect) and vasoconstriction (*a* effect)
4. Increases coronary perfusion during CPR by increasing aortic diastolic pressure

Indications:

1. Cardiopulmonary arrest
2. Anaphylaxis
3. Respiratory distress with wheezing
4. Pediatric symptomatic bradycardia
5. Neonatal resuscitation
6. Suspected croup or epiglottitis

Contraindications:

1. **Use with caution in pregnancy.**
2. **Consider base physician consultation if possible if the patient has history of MI, angina or hypertension.**

Adverse Effects:**Cardiovascular**

Tachycardia
Hypertension
Chest pain
Palpitations
Ventricular fibrillation

Neurological

Anxiety
Dizziness
Headache
Tremors

Seizures

Gastrointestinal

Nausea/vomiting

Administration:**ADULT DOSE**

1. **Asthma:** 0.01 mg/kg IM, not to exceed 0.5 mg, may repeat every 5 minutes, not to exceed 3 doses
2. **Allergic reaction/anaphylaxis:** 0.01 mg/kg IM, not to exceed 0.5 mg, may repeat every 5 minutes, not to exceed 3 doses

EPINEPHRINE 1:1,000 (Adrenalin®) CONTINUED**PEDIATRIC DOSE**

1. **Asthma:** 0.01 mg/kg, IM, not to exceed 0.3 mg, may repeat every 5 minutes, not to exceed 3 doses
2. **Allergic reaction/anaphylaxis:** 0.01 mg/kg, **IM**, not to exceed 0.3 mg, may repeat every 5 minutes, not to exceed 3 doses
3. **Bradycardia:** The first line drug in pediatric bradycardia is epinephrine 1:10,000

Notes:

- IM administration is with 1-1½" needle in anterior/lateral thigh or deltoid.
- Tachycardia is not a contraindication to Epinephrine.