

**EPINEPHRINE 1:1000 (generic), ADRENALINE (brand)**

**ACTION:** Stimulates both  $\alpha$  and  $\beta$  receptors; bronchodilator, cardiac stimulator, and peripheral vasoconstrictor

**INDICATIONS:**

1. Allergic reaction from stings, and ingested, inhaled, injected, or absorbed allergens resulting in the following: increased heart rate, decreased BP, respiratory distress, hives, facial or airway swelling.
2. Anaphylaxis with evidence of difficulty communicating, muscle retraction, nasal flaring, and/or swelling of tongue or throat.
3. Asthma, as a second line treatment after nebulization

**CONTRAINDICATIONS:**

1. None during cardiac arrest; otherwise tachyarrhythmias
2. Do not administer IV bolus.

**PRECAUTIONS:**

1. **Do not use in patients < 12 or > 40 years of age without physician order.**

**ADVERSE REACTIONS/SIDE EFFECTS:**

1. Nervousness, restlessness, and tremors
2. Headache and HTN
3. Arrhythmias and angina

**ADMINISTRATION:**

1. For non-severe reactions (no anaphylactic shock or impending respiratory or cardiac arrest): Epinephrine 0.3 mg (0.3 cc of 1:1000 solution) SQ or IM may be given to patients (ages 12 - 40 years) prior to medical control contact. Consider follow up dosing with Benadryl.
2. For severe reactions (anaphylactic shock or impending respiratory or cardiac arrest): Administer 0.5 mg 1:1000 epinephrine SQ/IM. Follow with Benadryl 25 mg IV or 50 mg IM prior to Medical Control Physician contact.
3. For acute asthma attack, if albuterol neb(s) have been unsuccessful:
  - A. Epinephrine 0.3 mg (0.3 cc of 1:1000 solution) SQ may be given to patients (ages 12 - 40 years) prior to medical control contact.
4. Obtain MD order before administering epinephrine in patients <12 or > 40 years of age.
5. An epinephrine drip should only be established on physician order. When administering an epinephrine infusion, **a Buretrol with 60 gtt tubing must be used.**
6. To mix a drip, add 1 mg of epinephrine 1:1000 to 500 cc NS (2 mcg/cc). The initial dose for adults is 1 mcg/min titrated to desired hemodynamic response (2 - 10 mcg/min).

<b>Infusion rate</b>	<b>gtts/min (w/ 60 gtt tubing):</b>
1 mcg/min	30 gtts/min

**PEDIATRIC CONSIDERATIONS:**

1. For non-severe reactions (see above for definition): Obtain physician order.
2. For severe reactions (see above for definition): May administer 0.01 mg/kg (ml/kg) IV/IO or IM prior to physician contact.

**SPECIAL NOTES:**

1. IV administration is the route of choice for anaphylactic shock and if given, should be administered in the 1:10,000 concentration, however, if IV access is not readily obtainable, the 1:1000 concentration may be given SQ or IM.