

Initial Date: 10/25/2017  
Revised Date: 10/01/2021

Section 9.41

## ***Epinephrine***

### **Protocols:**

1. Anaphylaxis/Allergic Reaction
2. Shock
3. Respiratory Distress (Adult)
4. Pediatric Respiratory Distress, Failure, or Arrest
5. Adult Cardiac Arrest – General
6. Adult Bradycardia
7. Pulmonary Edema/CHF
8. Return of Spontaneous Circulation
9. Pediatric Cardiac Arrest - General
10. Pediatric Bradycardia






### **Indications:**

1. Anaphylaxis
2. Bradycardia
3. Respiratory distress
4. Hypotension
5. Cardiac arrest

### **Contraindications:**

1. No contraindications in critical patients



### **Dosing:**

-  1. Epinephrine auto-injector (Protocols 1, 3, 4, MFR per MCA selection in protocol 1)
  - a. Adults 0.3 mg, IM
  -  b. Pediatrics
    - i. 0.15 mg, IM
    - ii. Pediatric auto-injector indicated for patients greater than 10 kg and less than 30 kg
-  2. Epinephrine 1mg/1mL (Protocols 1, 3, 4)
  - a. Adults 0.3 mg IM
  -  b. Pediatrics
    - i. For patients less than 10 kg contact medical control prior to administration
    - ii. For patients greater than 10 kg, administer 0.01 mg/kg, up to 0.3 mg
-  3. Nebulized (Protocol 4)
  - a. Racementepinephrine 2.25%
    - i. Place 0.5 mL in nebulizer

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- ii. Dilute with 3 mL normal saline
- b. Epinephrine (1mg/1mL), 5 mL (5 mg) nebulized
- 4. Epinephrine 1mg/10mL
  - a. IV Bolus (Protocols 5, 9, 10, 11)
    - i. Adults 1 mg every 3 to 5 minutes in cardiac arrest
    -  ii. Pediatrics 0.01 mg/kg (0.1mL/kg)
  - b. Push dose (Protocols 2, 6, 8)
    - i. Prepare by combining 1 mL of Epinephrine 1 mg/10 mL with 9 mL NS
    - ii. Adults
      - 1. Administer 10-20 mcg (1-2 mL Epinephrine 10 mcg/mL)
      - 2. Repeat every 3 to 5 minutes
      - 3. Titrate to SBP greater than 90 mm/Hg
    -  iii. Pediatrics
      - 1. Administer 1 mcg/kg (0.1 mL/kg Epinephrine 10 mcg/mL)
      - 2. Maximum dose 10 mcg (1 mL)
      - 3. Repeat every 3-5 minutes

**Expected Effects:**

- 1. Decreased wheezing
- 2. Increased BP
- 3. Increased HR