Dyspnea (excluding CHF)

**History**
- Asthma; COPD – chronic bronchitis and emphysema
- Home treatment (e.g. oxygen or nebulizer)
- Medications (e.g. Theophylline, steroids, inhalers)
- Toxic exposure or smoke inhalation

**Signs and Symptoms**
- Shortness of breath
- Pursed lip breathing
- Decreased ability to speak
- Increased respiratory rate and effort
- Wheezing or rhonchi
- Use of accessory muscles
- Cough
- Tachycardia

**Differential**
- Asthma
- Anaphylaxis
- Aspiration
- COPD (emphysema or bronchitis)
- Pleural effusion
- Pneumonia
- Pulmonary embolus
- Pneumothorax
- Cardiac (MI or CHF)
- Pericardial tamponade
- Hyperventilation
- Inhaled toxin (e.g. carbon monoxide, etc.)

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**Flowchart**

1. **History**
   - Obvious distress with ↓ air movement?
   - Yes:
     - **Apply Oxygen to maintain goal SpO2 93 to 95%**
     - Airway support
     - Cardiac monitor
     - 12-Lead ECG
     - EtCO2 monitoring
     - Establish IV/IO
   - No:
     - **Support airway**

2. **Differential**
   - **PERI-ARREST OR SEVERE DISTRESS**
     - Consider administering Epinephrine 1:1,000 0.3mg IM before administering Albuterol
   - **Albuterol nebulizer 5mg**
     - Repeat as needed
     - Consider CPAP

3. **Improving?**
   - Yes:
     - **Notify receiving facility.**
     - **Contact Base Hospital for medical direction**
   - No:
     - **If no improvement, consider**
       - Epinephrine 1:1,000 0.3mg IM
       - (Use 0.15mg for patients > 50 years of age)

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**Effective Jan. 2019**

Contra Costa County Emergency Medical Services

Treatment Guideline A09

Page 1 of 2
Pearls

- Patients receiving epinephrine should receive a 12-Lead ECG at some point in their care in the prehospital setting, but this should NOT delay the administration of Epinephrine.
- Epinephrine may precipitate cardiac ischemia. The following patients should receive half the adult dose of Epinephrine (0.15mg Epinephrine 1:1,000) for the initial dose and any repeated doses:
  - Patients with a history of coronary artery disease, MI, stents, CHF, cardiac surgery; OR
  - Patients over 50 years of age and has a heart rate ≥ 150.
- Pulse oximetry and continuous EtCO₂ monitoring is required for all respiratory patients.
- A silent chest in respiratory distress is a pre-respiratory arrest sign.
- CPAP is not a ventilation device. Patients with an inadequate respiratory rate or depth of respiration will need assistance with a BVM.