**Shortness of Breath – Wheezes/Other**

### ADULT

#### BLS Procedures

Administer oxygen as indicated

Initiate CPAP for both moderate and severe distress – 8 years of age and older

Assist patient with prescribed Metered Dose Inhaler if available

**Severe Distress Only**

- Epinephrine 1 mg/mL
  - If Under 30 kg
    - IM 0.15 mg
    - May repeat x 1 in 5 minutes if patient still in distress
  - If 30 kg and Over
    - IM – 0.3 mg
    - May repeat x 1 in 5 minutes if patient still in distress

#### ALS Standing Orders

Perform Needle Thoracostomy if indicated per VCEMS Policy 715

If not already performed by BLS personnel, consider CPAP for both moderate and severe distress

**Moderate Distress**

- **Albuterol**
  - Nebulizer – 5 mg/6 mL
  - Repeat as needed

**Severe Distress**

- **Epinephrine 1 mg/mL**, if not already administered by BLS personnel
  - IM – 0.3 mg
  - May repeat q 5 minutes if patient still in distress and unable to establish IV/Io
- **Albuterol**
  - Nebulizer – 5 mg/6 mL
  - Repeat as needed
- Establish IV/Io and make BHC in anticipation of push dose epi orders

If hypotensive, consider alternative etiologies and refer to additional treatment protocols

### PEDIATRIC

#### Perform Needle Thoracostomy if indicated per VCEMS Policy 715

If not already performed by BLS personnel, consider CPAP for both moderate and severe distress

**Moderate Distress**

- **Albuterol**
  - If Under 30 kg
    - Nebulizer – 2.5 mg/3 mL
  - If 30 kg and Over
    - Nebulizer – 5 mg/6 mL
  - Repeat as needed

**Severe Distress**

- **Epinephrine 1 mg/mL**, if not already administered by BLS personnel
  - IM – 0.01 mg/kg up to 0.3 mg
  - May repeat q 5 minutes, if patient remains in distress
- **Albuterol**
  - If Under 30 kg
    - Nebulizer – 2.5 mg/3 mL
  - If 30 kg and Over
    - Nebulizer – 5 mg/6 mL
  - Repeat as needed
- Establish IV/Io and make BHC in anticipation of push dose epi orders

**Suspected Croup**

- **Normal Saline**
  - Nebulizer/Aerosolized Mask – 5 mL

If hypotensive, consider alternative etiologies and refer to additional treatment protocols

### Base Hospital Orders Only

**Severe Distress, not improving with prior epinephrine administration**

- **Epinephrine 10 mcg/mL**
  - 1 mL (10 mcg) q 2 minutes, slow IV/Io push
  - Titrate to overall improvement in work of breathing

**Suspected Croup and no improvement with Normal Saline nebulizer**

- **Less than 30 kg**
  - **Epinephrine 1 mcg/mL**
  - Nebulizer/Aerosolized Mask – 2.5 mg/2.5 mL
  - 30 kg and greater
  - **Epinephrine 1 mcg/mL**
  - Nebulizer/Aerosolized Mask – 5 mg/5 mL

**Severe Distress, not improving with prior epinephrine administration**

- **Epinephrine 10 mcg/mL**
  - 0.1 mL/kg (1 mcg/kg) every 2 minutes, slow IV/Io push
  - Max single dose of 1 mL or 10 mcg
  - Titrate to overall improvement in work of breathing

Consult with ED Physician for further treatment measures

**Additional Information:**

- Refer to VCEMS Policy 735 for additional information on preparing push dose epinephrine solution.
- Use of a metered dose inhaler (Albuterol 90 mcg/puff) is indicated for fireline paramedics, in accordance with VCEMS Policy 627.
- High flow O2 is indicated for severe respiratory distress, even with a history of COPD
- COPD patients have a higher susceptibility to spontaneous pneumothorax due to disease process
- If suspected Arterial Gas Embolus/Decompression Sickness secondary to SCUBA emergencies, transport patient in supine position on 15L/min O2 via mask. Early BH contact is recommended to determine most appropriate transport destination.

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**Effective Date:** July 1, 2020  
**Next Review Date:** May 31, 2022  
**Date Revised:** May 14, 2020  
**Last Reviewed:** May 14, 2020  

VCEMS Medical Director