

# Southern Illinois Regional EMS System

## EE-1 ACUTE ASTHMA/COPD WITH WHEEZING

### FR/BLS

- Adult Patient Assessment and Initial Medical Care protocol
- Assess breath sounds.
- Focus on history of patient's current asthma/COPD meds, time, and amount of last dose.
- Consider possibility of CHF/Pulmonary Edema.
  - If wheezing present in a geriatric patient, consider pulmonary edema until proven otherwise:

### Minimal Distress:

- Asthma - Oxygen at 4-6L/nasal cannula.
- COPD - Oxygen at 2-4L/nasal cannula.
- Contact Medical Control
- Transport with continuous pulse ox monitoring.

### Patient with History of Asthma. Moderate to Severe Distress:

- Oxygen 15 LPM NRB or BVM
- (BLS) **Albuterol 2.5 mg** via nebulizer
  - Medical Control order needed for albuterol administration to patients > 50 y/o or patients with a cardiac history.
- Contact Medical Control.
- Consider ALS upgrade
- Rapid Transport

### Patient with History of Asthma, Extreme/Severe Distress (absent/diminished breath sounds due to bronchoconstriction or patient is hypoxic and/or exhausted).

- Assist ventilations with a BVM at 100% O<sub>2</sub>, and prepare to fully support ventilations
- Consider ALS upgrade
- Rapid transport.

### Patient with History of COPD with Wheezing: Moderate to Severe Distress:

- Oxygen 15 LPM NRB or BVM
- Contact Medical Control.
- (BLS) **Albuterol 2.5 mg** via nebulizer
- Medical Control order required to administer albuterol to patients that have history of COPD with wheezing
  - Albuterol can be given prior to Medical Control contact if patient receives albuterol nebulizer treatments at home.
- Consider ALS upgrade
- Rapid Transport

### Patient with History of COPD with Wheezing: Extreme/severe distress (absent/diminished breath sounds due to bronchoconstriction or patient is hypoxic and/or exhausted).

- Assist ventilations with a BVM at 100% O<sub>2</sub>, and prepare to fully support ventilations
- Consider ALS upgrade
- Rapid transport.

# Southern Illinois Regional EMS System

## EE-1 ACUTE ASTHMA / COPD WITH WHEEZING (continued).

### ILS/ALS

- Adult Patient Assessment and Initial Medical Care protocol
- Assess breath sounds.
- Focus on history of patient's current asthma/COPD meds, time, and amount of last dose.
- Consider possibility of CHF/Pulmonary Edema.
  - If wheezing present in a geriatric patient, consider pulmonary edema until proven otherwise.

### Minimal Distress:

- Asthma - Oxygen at 4-6L/nasal cannula.
- COPD - Oxygen at 2-4L/nasal cannula.
- Contact Medical Control
- Transport with continuous pulse ox monitoring.

### Patient with History of Asthma. Moderate to Severe Distress:

- Oxygen 15 LPM NRB or BVM
- IV of NS or LR at TKO rate
  - Do not delay treatment attempting an IV.
- Continuously monitor ECG and pulse ox
  - Consider 12 lead if applicable
- **Albuterol 2.5 mg** via nebulizer
  - Medical Control order needed for albuterol administration to patients > 50 y/o or patients with a cardiac history.
- Contact Medical Control.
- If patient is non-responsive to or has tolerance to Albuterol:
  - **DuoNeb 0.5 mg / 3.0 mg** via nebulizer
- If no response to nebulizer or severe distress: **Epinephrine (1:1000) 0.3 mg IM/SQ.**
- Consider CPAP, per Medical Control.

### Patient with History of Asthma, Extreme/Severe Distress (absent/diminished breath sounds due to bronchoconstriction or patient is hypoxic and/or exhausted).

- If imminent respiratory arrest, prepare for endotracheal intubation
- Consider in-line albuterol through ET tube.
- Rapid transport.

### Patient with History of COPD with Wheezing: Moderate to Severe Distress:

- Oxygen 15 LPM NRB or BVM
- IV of NS or LR at TKO rate
  - Do not delay treatment attempting an IV.
- Continuously monitor ECG and pulse ox
  - Consider 12 lead if applicable
- Contact Medical Control.
- **Albuterol 2.5 mg** via nebulizer

# Southern Illinois Regional EMS System

## EE-1 ACUTE ASTHMA / COPD WITH WHEEZING (continued)

- Medical Control order required to administer albuterol to patients that have history of COPD with wheezing
  - Albuterol can be given prior to Medical Control contact if patient receives albuterol nebulizer treatments at home.
- If patient is non-responsive to or has tolerance to Albuterol:
  - **DuoNeb 0.5 mg / 3.0 mg** via nebulizer
- If no response to nebulizer or severe distress: **Epinephrine (1:1000) 0.3 mg** IM/SQ.
- Consider CPAP, per Medical Control.

Patient with History of COPD with Wheezing: Extreme/severe distress (absent/diminished breath sounds due to bronchoconstriction or patient is hypoxic and/or exhausted).

- If imminent respiratory arrest, prepare for endotracheal intubation.
- Consider in-line albuterol through ET tube.
- Rapid transport.

### Notes:

- Epinephrine must be ordered by medical control before giving to a COPD patient with wheezing. Albuterol can be given prior to radio contact if the patient has own prescription and receiving it at home.
- Do not delay transport waiting for a response to Albuterol, DuoNeb, or Epinephrine.
- Albuterol or DuoNeb may be administered via nebulizer/mouthpiece device, nebulizer/mask or in-line nebulization on intubated patients.
- Supplemental oxygen may be administered via nasal canula in the patient using the nebulizer/mouthpiece device if the patient is exhibiting signs/symptoms of hypoxia.
- CPAP is very effective in the treatment of CHF/Pulmonary Edema but should only be considered by Medical Control on COPD and asthma cases.
- CPAP should not be initiated on patients with a systolic BP < 90mmHg. CPAP increases intrathoracic pressure and can decrease venous return to the heart (compromising the patient's perfusion). Consult with Medical Control and use CPAP cautiously if the systolic blood pressure is between 90mmHg and 100mmHg for the same reason.