



This protocol will focus on patients with medical causes as a source of their respiratory distress. Management of patients with dyspnea associated with trauma is not covered in this protocol. Obtain and document a pulse oximetry reading on all patients treated under this protocol.

## A. Acute COPD:

Adult Care

### EMR/BLS

1. Initial Assessment/Care (**Procedure 1**).
2. Position patient sitting upright to improve effort of breathing.
3. Administer supplemental oxygen (**Procedure 1**) as needed.

### ALS

4. Administer **Albuterol, 2.5 mg** mixed with **Atrovent, 0.5 mg** via nebulizer (**Procedure 2**).
5. **Albuterol, 2.5 mg** via nebulizer (**Procedure 2**).
6. If indicated by continued distress, administer a third **Albuterol 2.5 mg** (**Procedure 2**).

**NOTE: Because COPD patients are chronically ill, they may have poor secretion clearance, and sometimes have excessive mucus production and often have lung infections (possible pneumonia). Assessment should ascertain the presence of fever, the presence of other signs of infection (e.g. body aches, general malaise, or pain when breathing) and breath sounds are consistent with pneumonia such as rhonci, localized or one-sided crackles.**

## B. CHF/Pulmonary Edema:

Adult Care

### EMR/BLS

1. Initial Assessment/Care (**Procedure 1**).
2. Position patient sitting upright to improve effort of breathing.
3. Suction as necessary.
4. Insert an oropharyngeal or nasopharyngeal airway if indicated.



5. Administer supplemental oxygen (**Procedure 1**), preferably by Bag-mask device with positive end-expiratory pressure (PEEP) set at 10 cm H<sub>2</sub>O and assist in ventilations when the patient inhales approximately 1 breath every 5-6 seconds (10-12 breaths/min for adults).
6. The patient's respiratory status should be monitored with waveform capnography, if it is unavailable, the use of pulse oximetry will suffice.

ALS

7. **If the systolic BP is > 110 mmHg:**
  - a) Administer **Nitroglycerin, 0.4 mg SL** (SEE NOTE). Repeat every 3-5 minutes if systolic BP remains above 110 mmHg or until complete relief of signs or symptoms.
  - b) Administer **Furosemide (Lasix), 40 mg or 80 mg (if the patient already takes diuretics) IV/IO/IM**, if systolic BP remains above 110 mmHg. May be repeated once as needed.
8. **If systolic BP is less than 90 mmHg:**
  - a) Administer **Dopamine 10 mcg/kg/min**. Titrate to maintain a minimum systolic BP of > 100 mmHg.

**NOTE: 12 Lead ECG with continuous ECG Monitoring will be performed for all CHF / Pulmonary edema patients, treatment and/or transport will not be delayed to obtain ECG.**

### C. Acute Bronchospasm (Asthma):

#### Adult Care

EMR/BLS

1. Initial Assessment/Care (**Procedure 1**).
2. Position patient upright to improve effort of breathing.
3. Administer supplemental oxygen (**Procedure 1**) as needed.

ALS

4. Administer **Albuterol, 2.5 mg** mixed with **Atrovent, 0.5 mg** via nebulizer (**Procedure 2**).
5. Repeat **Albuterol, 2.5 mg** via a nebulizer (**Procedure 2**).



6. If continued severe bronchospasms are noted after the administration of bronchodilators, administer **Magnesium Sulfate 2 grams over 10 minutes**.

### PROTOCOL NOTE:

DO NOT administer Nitroglycerin if a patient is known or suspected to have taken Viagra (sildenafil), Revatio (sildenafil) or Levitra (vardenafil) within the last 24-hours OR Cialis (tadalafil), Adcirca (tadalafil) within the last 72 hours. There may be additional sexually enhancing drugs that apply. Revatio is prescribed for pulmonary hypertension.

### D. Respiratory Depression:

**For suspected opiate-type overdoses (such as codeine, heroin, fentanyl, hydrocodone, morphine, oxycodone etc.), which may present also with constricted pupils.**

#### EMR / BLS

1. Initial Assessment/Care (**Procedure 1**).
2. Administer supplemental oxygen (**Procedure 1**) as needed.
3. Administer intranasal Narcan via the M.A.D device.
  1. Assemble equipment (**Procedure 39**).
  2. Administer 1 mg (1 cc) in each nostril.

#### ALS

4. Administer **Narcan (Naloxone), 0.4 mg IV SLOWLY**. Narcan (Naloxone) may be repeated as needed until the patient's respiratory drive returns to a sustainable level.
5. Narcan (Naloxone) will be discontinued once the patient's respiratory drive returns to a sustainable level.

**NOTE: Narcan (Naloxone) should be administered ONLY to patients showing signs of respiratory depression.**