

RESPIRATORY – RELATED SIGNS AND SYMPTOMS

SIGNS & SYMPTOMS:

1. Dyspnea, tachypnea, or hyperventilation
2. Cough (productive or nonproductive)
3. Wheezing, stridor, or crowing
4. Rales, rhonchi, ↓ or ≠ lung sounds
5. Difficulty speaking & accessory muscle use
6. Orthopnea or tripod positioning
7. Cyanosis, ↓ O₂ sats, agitation or anxiety

OBTAIN HISTORY OF:

1. Past Medical History (PMH)
2. Medications and allergies
3. Cardiorespiratory disease
4. Onset, severity, & duration
5. Relieving factors (rest, inhaler, nebs)
6. Recent illness or trauma
7. Substance abuse (esp. tobacco)
8. Environmental or allergen exposure

PRECAUTIONS:

1. This guideline refers to spontaneously breathing and perfusing patients.

BASIC LIFE SUPPORT CARE:

1. Assess respiratory effort/quality by listening to lung sounds and by assessing their speech-to-breath ratio (1-word, short sentences or full sentences). Document initially and after each treatment.
2. Administer oxygen, monitor O₂ saturation, and capnometry if available.
3. Place patient in position of comfort and reassure.
4. Consider ALS response.
5. EMT with IV training - establish IV of NS TKO.
6. Initiate ECG monitoring. Obtain 12-lead ECG if signs and symptoms suggest cardiac etiology.
7. Assist patient with prescribed medications as directed by private physician.
8. Start CPAP therapy if appropriate and available.
9. BLS with medication training: For wheezing, suspected asthma and COPD, administer albuterol neb. Adults and children may receive continuous nebs on standing order at adult strength with reassessment in between if symptoms persist. Consider obtaining peak expiratory flow rate initially and after each treatment.
10. Using a BVM, assist respirations in any patient with decreased LOC and respiratory rates of < 10 or > 30/min.
11. If an asthma patient is in need of respiratory support, decrease ventilations to 8 per minute and perform manual exhalation if lung deflation is poor.

ADVANCED LIFE SUPPORT CARE: In addition to above and as appropriate:

1. Suspected asthma and COPD:

- A. If wheezing, administer one albuterol/Atrovent neb. If further nebs are indicated, additional albuterol-only nebs may be given as needed.
- B. For COPD patients with wheezing in respiratory distress, administer albuterol and Atrovent
- C. For severe distress unrelieved by nebs, administer 0.3 mg epinephrine 1:1000 SQ in patients from 12 - 40 years. Obtain physician order before administering epinephrine to other ages.
- D. For severe asthma, consider magnesium sulfate 2 gm (4 cc of a 50% solution) diluted in 10 cc of NS and administer by slow IV/IO push over 1 – 2 minutes.
- E. Consider tension pneumothorax if patient is hard to ventilate with poor compliance and is hypotensive.

2. For pulmonary edema:

- A. BP > 140/p = Administer 0.8 mg of NTG SL every 3 - 5 minutes titrated to patient response.
- B. BP 90/p – 140/p = Administer 0.4 mg of NTG SL every 3-5 minutes titrated to patient response.
- C. Administer morphine 1 - 8 mg IV/IO slowly titrated to patient response.

- D. Consider nebs (as above) if lung sounds are hard to assess or if crackles are questionably wheezes.
- 3. Consider tension pneumothorax if patient is hard to ventilate with poor compliance, hypotensive and has narrowing pulse pressures or who has subcutaneous air.
- 4. Further orders must come from monitoring physician.

PEDIATRIC CONSIDERATIONS:

- 1. ALS: Children may receive one albuterol/Atrovent neb at adult strength on standing order. If further nebs are indicated, additional albuterol-only nebs may be given, as indicated, prior to medical control contact.
- 2. ALS: Consider Racemic Epinephrine for croup patients who are in respiratory distress.

SPECIAL NOTES:

- 1. Patients who receive treatment for respiratory distress should be transported to a medical facility for further evaluation. If patient refuses transportation, consult with Medical Control Physician before releasing patient.