

# AG06 Breathing Difficulty

## Objectives:

- To assess and treat patients with breathing difficulty
- To determine the most likely cause of the patient's breathing difficulty

## General Information:

- A patient with a history of CHF that has wheezing upon auscultation of lung sounds should not be automatically classified as an asthma or COPD patient. Each of the following conditions may produce wheezing.
- Pulmonary edema from congestive heart failure (CHF)
  - a Congestive heart failure is primarily a cardiac event, not a respiratory event. Treatment should focus on reducing preload and after load
  - b CPAP is an appropriate first-line treatment
    - i It is acceptable to briefly remove the CPAP mask to administer nitroglycerin
    - ii Consider sedation if necessary (physician orders for Intermediates/Paramedics)
  - c Lasix may not be appropriate for patients with end-stage renal failure. Consult Medical Control for more direction
  - d Pulmonary edema in the early stages can sound like wheezing
  - e Patients with clear breath sounds or unilateral crackles should be transported without medication
- Transdermal Nitroglycerin (I and P only)
  - a Sub Lingual should be given first, whenever possible; transdermal nitro has a slower onset (>30 minutes)
- Bronchoconstriction (asthma, COPD)
  - a Patients in severe distress or those who have not responded to home therapy may receive albuterol 2.5 mg/atrovent 0.5 mg as a first-line treatment
  - b Atrovent is only allowed once under standing orders
  - c EMT-Bs may only administer patient's MDI.
  - d Patients with severe asthma or COPD may not exhibit wheezing due to insufficient tidal volume
  - e For severe asthma, Medical Control may order other medications:
    - i Epinephrine 1:1,000 0.01 mg/kg SQ or IM, max dose 0.5 mg
    - ii Magnesium sulfate 2 g over 5 minutes
- Treatment of breathing difficulty should begin without delay



## Warnings/Alerts:

- Do not administer Epinephrine 1:1,000 IV
- Do not administer nitroglycerin if the patient has taken sexually enhancing medications (ie. Viagra, Levitra or Cialis) within the past 72 hours
- CPAP may worsen any existing hypotension
- Patients must have adequate respirations for CPAP to be effective

## OMD Notes:

- Albuterol should be given any time a CHF patient is wheezing
- Provider shall administer a minimum of 1 SL Nitroglycerin prior to application of CPAP

## References:

## Performance Indicators:

Breath Sounds Before and After Treatment  
Initial and Ongoing SpO2

CPAP Application      Sedative Use  
Treatment and Response to Treatment

