CPAP COMPETENCY TEST SCENARIOS

Instructions: These are sample scenarios to use with the CPAP skills check off. Expand on them as needed. Each scenario should have a complication/challenge to resolve after CPAP is applied, if it is indicated. Each EMT/Paramedic is expected to make an accurate assessment of a patient in respiratory distress and determine whether or not they are a candidate for CPAP. They must then competently apply mask CPAP and monitor the patient appropriately. Read the chosen scenario and additional information as requested by the EMT/Paramedic. Have another individual act the role of the patient and simulate the physical findings.

Scenario One
Dispatch: 65 y/o Male c/o of shortness of breath
HPI: 1 week h/o progressive dyspnea with exertion. Unable to lay down flat without shortness of breath, no chest pain or cough.
PmHx: Hypertension, Diabetes
Medications: Lasix, Atenolol, and Glucaphage
Physical Exam: 260 lb woman sitting in recliner.
Vital Signs: BP 100/80, HR 140 sinus tachycardia, RR 38, O2 sat 58%, LOC does not follow commands, cannot hold self up, airway patent
HEENT: Cyanosis, JVD present
Pulmonary: Silent Chest
Extremities: Cyanotic, 3+ pedal edema
After CPAP started:
• 5 min Vital Signs: HR 100, RR 24, BP 100/60, O2 sat 84%, LOC Verbal stimuli
• 10 min Vital Signs: HR 30, RR 6, BP 60/40, O2 sat 60%, LOC Unresponsive (complication- Hypotension)

Scenario Two
Dispatch: You are called to a 54 y/o woman c/o breathing problems
HPI: Increasing shortness of breath for 1 day despite the use of inhalers.
PmHx: COPD, Hypertension, and Diabetes
Medications: Albuterol Inhaler, Lasix, and Aspirin
Physical Exam: Thin white female on home oxygen breathing through pursed lips sitting in a tripod position.
Vital Signs: BP 180/90, HR 120 sinus tachycardia, RR 30, O2 sat 88%, LOC alert, airway patent.
HEENT: Perioral cyanosis, no JVD
Pulmonary: Lung auscultation reveals inspiratory and expiratory wheezes. The patient has 3 word speech dyspnea.
Extremities: Cyanotic, no pedal edema
After CPAP started:
• 5 min Vital Signs: HR 130, RR 24, BP 160/90, O2 sat 92%, LOC Alert
• 10 min Vital Signs: HR 140, RR, 38, BP 100/40, O2 sat 72%, LOC Alert, complaining of increasing SOB and chest pain (Complication: Pneumothorax)
Scenario Three
Dispatch: 65 y/o man c/o of shortness of breath
HPI: 1 week h/o progressive dyspnea with exertion. Unable to lay down flat without shortness of breath, no chest pain or cough.
PmHx: Hypertension, Diabetes
Medications: Lasix, Atenolol, and Glucaphage
Physical Exam: 260 lb woman sitting in recliner.
Vital Signs: BP 100/80, HR 140 sinus tachycardia, RR 30, O2 sat 78%, LOC follows commands, airway patent
HEENT: Cyanosis, JVD present
Pulmonary: Rales in all lung fields
Extremities: Cyanotic, 3+ pedal edema
After CPAP started:
   Due to the patients altered LOC and profound respiratory fatigue, the patient is not a candidate for CPAP to begin with. The patient does not respond to CPAP. Intubation is indicated. The EMT/Medic Fails if they do not intubate the patient.
   - 5 min Vital Signs: HR 150, RR 40, BP 160/90, O2 sat 54%, LOC poor
   - 10 min Vital Signs: HR 150, RR, 6, BP 100/90, O2 sat ??%, LOC unresponsive