Northwest Community EMS System

Continuing Education Class Credit Questions
Respiratory Assessment – January 2012

Name (PRINT):	Date submitted:
Affiliation:	Rating: [ ] Complete [ ] Incomplete

Reminder: You must schedule to take the class post-test with your assigned hospital EMS Coordinator/educator or their designee after this packet has been approved as complete.

The answers are found in the January 2012 class handout, independent study materials and/or the SOPs.

1. All respiratory problems can be categorized as impacting one of three things. List them.

   _____

   _____

   _____

   It's our job to figure out what's wrong to determine appropriate care.

2. What are the purposes of conducting a physical assessment? List at least two.

   _____

   _____

3. Why does a patient with ventilatory impairment or respiratory distress often assume an upright or sitting position?

   _____

   _____

   _____

4. What should EMS inspect specifically about the AIRWAY during the Primary Assessment?

   _____

   _____

   _____

5. What audible sounds indicating airway or ventilatory impairment can be heard w/o a stethoscope when inspecting the airway? List 2 of 8

   _____

   _____

6. What should be the first thing to assess about breathing during the Primary Assessment?

   _____

   _____

7. What 3 thoracic injuries present an immediate life-threat and must be found & resuscitated during the "B" (Breathing) phase of the Primary Assessment?

   _____

   _____

   _____

8. If a patient presents with asymmetric chest expansion (hyperinflation of one side) and jugular vein distension, what two things should EMS assess next to differentiate the life threat?

9. If a pt presents with paradoxical chest wall motion, severe pleuritic chest pain, dyspnea, crepitus, shallow, rapid respirations, clear bilateral breath sounds yet $SpO_2 < 90$ despite O_2, administration, what should be suspected?

   What O_2 device should be applied to this patient to provide non-invasive pressure support?

10. Why does an open pneumothorax pose an immediate life threat?

11. What is the assessment finding that suggests airway resistance or increased work of breathing?

12. What injury should be suspected if a pt breathes using only their diaphragm and not the chest wall?

13. Why does a patient with COPD breathe out passed pursed lips?

14. What should be suspected if a patient presents with a new onset voice change or stuttering?

15. Why does gastric distension with air pose a ventilation problem?

16. What should be anticipated in ps who are obese with respect to the primary assessment/care?

    Work of breathing: _____

    Intensity of breath sounds: _____

    SpO_2 monitoring (results and type of sensor to use): _____

    Recommended O_2 delivery device: _____

    Capnography numeric reading: _____

17. What general information is obtained by assessing skin color, temp & moisture?

18. What changes the skin from a normal to a dusky color when a patient is severely hypoxic?

_____

Under what circumstances is skin color an unreliable clinical finding?

_____

19. List 2 subjective (non-numeric) S&S of hypoxia

_____

_____

20. What does the pulse oximetry monitor measure?

A. Adequacy of ventilation
B. Level of CO_2 in the blood
C. Amount of O_2 dissolved in plasma
D. % of hemoglobin bound with a gas

21. If the SpO_2 is 90%, the pO_2 is: _____ Why is a pt at risk if the PaO_2 drops below this?

_____

Does the pulse ox monitor measure the oxygenation status of tissues and organ cells?

☐ Yes
☐ No

22. If a patient is cold, tremoring, vasoconstricted or has poor peripheral perfusion, what adjustment should be made to monitoring their oxygenation status?

A. Use a central pulse ox sensor
B. Apply the capnography monitor instead
C. Assume they are hypoxic and give 100% oxygen
D. Put a blanket over the hand with the pulse ox sensor to warm it up

23. Which of these will influence the amount of O_2 delivered to cells?

A. Acid-base status
B. Body temperature
C. The amount of hemoglobin
D. All of the above

24. Which of these will cause the SpO_2 reading to be an unreliable reflection of the pt's oxygenation status?

A. Severe pain
B. CO poisoning
C. Pulmonary edema
D. Acute myocardial infarction

25. Match the shape of the capnography waveform that is likely to be seen with each disease process.

A. Square or rectangular plateau B. Shark fin

_____ Respiratory condition with delayed exhalation like asthma or COPD
_____ Heart failure

What $EtCO_2$ numeric reading indicates hypoventilation with impending ventilatory failure? _____

26. Why can a patient with an uncomplicated AMI be harmed by hyperoxia?

_____

What should be the pulse ox target reading for a patient with return of spontaneous circulation (ROSC) following cardiac arrest?_____

What should be the pulse ox target reading for a patient with COPD? _____

27. Which of these is NOT a possible complication of using CPAP?

A. Collapse of the alveoli
B. Decrease in blood pressure
C. Gastric distension and vomiting
D. Patient anxiety and claustrophobia

28. Why is a 12 L ECG indicated if a patient presents with shortness of breath?

_____

_____

29. What types of conditions can present with pleuritic chest pain? (List 2)

_____

_____

30. Why should EMS listen for an S3 heart sound if a patient has frothy sputum?

_____

31. **Match the class or type to each of these drugs**

A. Ace inhibitors
B. Angiotensin 2 blockers
C. Beta blockers
D. Treat high cholesterol
E. Calcium channel blocker
F. Diuretic
G. Anticoagulant
H. Vasodilators

_____ metoprolol (Lopressor)
_____ rivaroxaban (Xarelto)
_____ rosuvastatin (Crestor)
_____ lisinopril (Prinivil)
_____ amlodipine (Norvasc)
_____ olmesartan (Benicar)

32. **Match the class or type to each of these drugs**

A. Short acting beta agonist
B. Long acting beta2 agonist
C. Anticholinergic
D. MAST cell inhibitor
E. Leukotriene modifier
F. Steroid

_____ Singulair (montelukast)
_____ Azmaort (triamcinolone)
_____ Atrovent (ipratropium)
_____ Nasalcrom (cromolyn)
_____ Serevent (salmeterol)

33. Why does a patient with chronic bronchitis develop JVD and peripheral edema?

_____

34. What should be assessed, as indicated, when palpating the chest? (List at least three things)

_____

_____

_____

35. What percussion note is elicited over normal aerated lung tissue? _____

What percussion note is elicited over a pneumothorax? _____

What percussion note is elicited over a hemothorax? _____

36. **Technique of breath sound assessment**

Where should the stethoscope be placed? Directly on skin / over one layer of clothing (**circle one**)

Patient position if hemodynamically stable: _____

Patient position if unstable or AMS: _____

Ask the patient to breathe through their mouth / nose (**circle one**)

How many lung lobes must be assessed? _____

Where should one start to listen? _____

Where should one start on the anterior chest?

A. Under each arm
B. Just below the clavicles
C. Just above the clavicles
D. Just above the nipple lines

37. When listening to normal vesicular lung sounds, inspiration **/** expiration (**circle one**) should sound louder and 2 times longer with a high **/** low (**circle one**) pitch.

Apply the concept of "sound matching":

- What will cause transmission of lungs sounds to be enhanced producing louder than normal sounds with higher frequencies? Consolidation / air or fluid in the pleural space (**circle one**)
- What will cause reflection of sound away from the chest wall causing breath sounds to be diminished or absent? Consolidation / air or fluid in the pleural space (**circle one**)

38. If bronchial breath sounds are heard over the periphery, what should one suspect?

_____

39. **Fill in the tables below:**

Differential	Crackles	Wheeze
Physiologic cause		
Description of what they sound like		
Timing (inspiration or expiration)		
Conditions that present with that sound generalized over all lung fields		
Conditions that present with that sound localized		

Differential	Pleural friction rub	Stridor
Physiologic cause		
Description of what they sound like		
Timing (inspiration or expiration)		
Conditions that present with that sound generalized over all lung fields		NA – don't need a stethoscope Heard with:
Conditions that present with that sound localized		

40. How can EMS tell the difference between wheezes caused by asthma or COPD and those caused by heart failure? List at least three differentiating assessments.

_____

_____

_____