

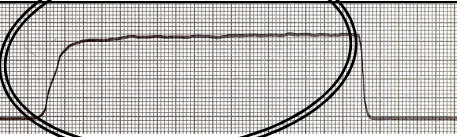
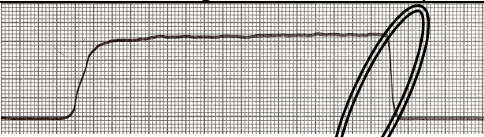
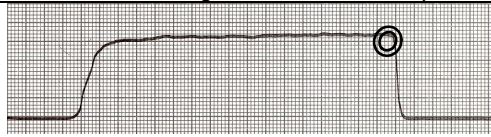
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<p>1. What information does a capnography sensor obtain?</p> <p>A CO level B O₂/CO₂ ratio C Oxygen level D Respiratory rate</p>	<p>2. What information does a capnography sensor obtain?</p> <p>A CO level B CO₂ level C O₂/CO₂ ratio D Oxygen levels</p>	<p>3. What information does a capnography sensor obtain?</p> <p>A CO level B O₂/CO₂ ratio C Oxygen level D CO₂ waveform</p>
<p>4. What is a cause of a low ETCO₂ level?</p> <p>A Fever B Hyperoxia C Hyperventilation D Return of spontaneous circulation</p>	<p>5. What is a cause of a low ETCO₂ level?</p> <p>A Hyperoxia B Hypotension C Hypoventilation D Hyperthyroidism</p>	<p>6. What is a cause of a high ETCO₂ level?</p> <p>A Hyperoxia B Hypothermia C Hypoventilation D Using excessive TV when ventilating pt</p>
<p>7. What will happen to ETCO₂ levels if you ventilate a pt too slowly?</p> <p>A Will fall B Will rise C Nothing - will not change D Nothing - if tidal volume is constant</p>	<p>8. What will happen to ETCO₂ levels if you ventilate a pt too fast?</p> <p>A Will fall B Will rise C Nothing - will not change D Nothing - if tidal volume is constant</p>	<p>9. What pts will normally have an elevated ETCO₂ value?</p> <p>A COPD B Geriatric C Pediatric D Heart failure</p>
<p>10. Where does exhaled CO₂ come from?</p> <p>A Excessive inhaled O₂ B Excessive inhaled CO₂ C Inhaled carbon monoxide D Aerobic cellular metabolism</p>	<p>11. What does capnography <u>NOT</u> measure?</p> <p>A Metabolism B Oxygenation C Perfusion D Ventilation</p>	<p>12. Can a pt have a normal O₂ sat, and an abnormal EtCO₂ level?</p> <p>A No B Yes C Only if CO exposure is present D Only if receiving supplemental O₂</p>
<p>13. How does capnography differ from pulse oximetry?</p> <p>A Capnography measures ventilation B Capnography tells you about oxygenation in low perfusion states C Capnography measures saturation of Hg with CO₂ D Capnography measures saturation of Hg with oxygen</p>	<p>14. Does a pts capnography tell you about the adequacy of a pts oxygenation?</p> <p>A No B Yes C Only if the pt is intubated D Only if pt is spontaneously breathing</p>	<p>15. What is an elevated ETCO₂ a sign of?</p> <p>A Alkalosis B Hypoxia C Respiratory failure D Carbon monoxide poisoning</p>
<p>16. Should capnography be used when BVM ventilating pt - prior to placement of advanced airway?</p> <p>A No B Yes C Only if ventilating pt for >5 minutes D Only if pre-oxygenating for advanced airway placement</p>	<p>17. Why should capnography be used when ventilating a pt - prior to placement of an advanced airway?</p> <p>A To prevent hyperventilation B To determine if an adequate amt of oxygen is being delivered C Capnography only needs to be used if the pt is in cardiac arrest D Capnography should only be used after placement of an advanced airway</p>	<p>18. What is a consequence of hyperventilation?</p> <p>A Hypercarbia B Decreased cardiac output C Increased cerebral perfusion D Increased coronary perfusion</p>
<p>19. In what 2 clinical situations would capnography be most useful?</p> <p>A Chest & abdominal pain B Abdominal pain & resp distress C Altered mental status & chest pain D Altered mental status & resp distress</p>	<p>20. When can capnography most help you make a clinical diagnosis?</p> <p>A Asthma/COPD vs ETT secretions B Asthma/COPD vs Heart Failure C Asthma/COPD vs Allergic reaction D Anxiety induced hyperventilation vs. pulmonary embolus</p>	<p>21. PM's have given midazolam to a pt; if the pt experiences respiratory depression, due to midazolam, which reading will change first?</p> <p>A Capnography B Blood pressure C Pulse oximetry (SpO₂) D 12L ECG ST segments</p>
<p>22. When should capnography ALWAYS be used?</p> <p>A On every pt B Every pt receiving oxygen C Only pts who are intubated D All pts receiving assisted ventilation</p>	<p>23. Will capnography identify right mainstem intubation?</p> <p>A No B Yes C Only if pt is not in cardiac arrest D Only if ET tube is size 7 or greater</p>	<p>24. With capnography, which data point will first demonstrate apnea has occurred?</p> <p>A Waveform B ETCO₂ value C Respiratory rate D Oxygen saturation</p>

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<p>25. How can capnography most accurately be used w/ pt receiving nebulizer tx?</p> <p>A They canNOT be used together B Place oral-nasal cannula on pt under neb-mask set-up C Capnography can only be assessed before and after a nebulizer tx D Pt must be intubated to use capnography while getting nebulizer tx</p>	<p>26. How can capnography most accurately be used on a pt receiving CPAP?</p> <p>A They canNOT be used together B Place oral-nasal cannula on pt under CPAP device C Capnography can only be assessed before and after CPAP D Capnography should not be used with CPAP as the values will be inaccurate</p>	<p>27. How can capnography be used in the pt who requires more than 6L of oxygen via nasal cannula?</p> <p>A It cannot be used in that situation B Capnography can only be used if the pt is intubated C Increase oxygen flow to capnography cannula to 15 L D Place capnography oral-nasal cannula on pt under NRB mask</p>
<p>28. Called for pt who OD'd on heroin; GCS 3, BP 130/80, P 90, R 4 shallow, O₂ sat 80%. What ETCO₂ would you expect?</p> <p>A Decreased B Normal C Elevated</p>	<p>29. Pt having asthma attack has an elevated ETCO₂; what's a likely cause?</p> <p>A Hypotension B Mild asthma attack C Severe asthma attack D Preexisting hypercarbia</p>	<p>30. What ETCO₂ reading would you expect in a pt hyperventilating from a severe panic attack?</p> <p>A Decreased B Normal C Elevated</p>
<p>31. What 2 things should be assessed and documented every 2 minutes when performing CPR?</p> <p>A O₂ sat & VS B O₂ sat & ECG C ECG & ETCO₂ D O₂ sat & ETCO₂</p>	<p>32. What capnography reading would you expect in shock, or cardiac arrest?</p> <p>A Decreased B Normal C Elevated</p>	<p>33. Why should capnography be used when treating the pt in cardiac arrest?</p> <p>A ETCO₂ is measure of cardiac output B The first ETCO₂ reading will determine if pt can be resuscitated C High initial ETCO₂ readings are indicative of a cardiac etiology D Capnography should not be assessed in pts receiving CPR as it is unreliable</p>
<p>34. During CPR, how will poor quality chest compressions affect ETCO₂?</p> <p>A Will fall B Will rise C Will not change D Will change only if ventilation rate changes</p>	<p>35. In cardiac arrest, what will happen to the ETCO₂ when return of spontaneous circulation (ROSC) occurs?</p> <p>A Will fall B Will rise C Will not change D Will change only if ventilation rate changes</p>	<p>36. During CPR, how will good quality chest compressions affect ETCO₂?</p> <p>A Will fall B Will rise C Will not change D Will change only if ventilation rate changes</p>
<p>37. PM's successfully resuscitated cardiac arrest pt. ETCO₂ = 58; pt is being ventilated @ 10/min w/ tidal volume just to chest rise. What should PM's do?</p> <p>A Administer NaBicarbonate B Increase rate/depth of ventilation C Decrease rate or depth of ventilation D Make no ventilation rate/depth change</p>	<p>38. PM's successfully resuscitated cardiac arrest pt. ETCO₂ = 30; pt is being ventilated @ 10/min w/ tidal volume just to chest rise. What should PM's do?</p> <p>A Assess for hypotension B Administer NaBicarbonate C Increase ventilation rate or depth D Decrease rate or depth of ventilation</p>	<p>39. How can adequacy of oxygenation best be assessed in cardiac arrest pts, when performing CPR?</p> <p>A Capnography B Pulse oximetry C Central color (lips, tongue) D There is no way to assess oxygenation in cardiac arrest pts</p>
<p>40. Why should capnography be used when treating the pt in cardiac arrest?</p> <p>A ETCO₂ measures quality of chest compressions B The first ETCO₂ reading will determine if pt can be resuscitated C High initial ETCO₂ readings are indicative of a cardiac etiology D Capnography should not be assessed in pts receiving CPR as it is unreliable</p>	<p>41. What factor guided EMS personnel to continue prehospital CPR for 96 minutes resulting in a neurologically intact survivor of cardiac arrest?</p> <p>A ECG rhythm B Capnography C Pulse oximetry D Insurance status of pt</p>	<p>42. What ETCO₂ reading is associated with a pt unlikely to be resuscitated?</p> <p>A Less than 5 for 10 minutes B Less than 10 for 20 minutes C Less than 15 for 20 minutes D Less than 20 for 10 minutes</p>

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<p>43. Where should capno sensors for spontaneously breathing pts be stored?</p> <p>A With ET tubes B In drug box/bag C In pouch on monitor D With NC & O2 masks</p>	<p>44. Where should capno sensors for assisted ventilation be stored?</p> <p>A With ET tubes B In drug box/bag C With/on BVM device D In pouch on monitor</p>	<p>45. What is the order for placement when using both capnography & RQP/ITD?</p> <p>A Placement order does not matter B Pt – RQP/ITD – capnography – bag C Pt – capnography – RQP/ITD – bag D Placement order depends on if an advanced airway has been placed</p>
<p>46. What is an <u>UN</u> likely cause of a sharkfin shaped capnography waveform?</p> <p>A Heart failure B Kinked ET tube C Secretions in airway D Tongue obstructing airway</p>	<p>47. What capnography waveform would you expect to see in acute heart failure pt?</p> <p>A Sharkfin B Curare cleft C Rectangular D Notched plateau</p>	<p>48. What capnography waveform would you expect to see in a pt experiencing an asthma attack?</p> <p>A Sharkfin B Curare cleft C Rectangular D Notched plateau</p>
<p>49. Which has a major influence on ETCO2 values?</p> <p>A pt age B gender C pt weight D perfusion</p>	<p>50. Which has a major influence on ETCO2 values?</p> <p>A pt age B ventilation C type of device used D main or microstream capnography</p>	<p>51. Which has a major influence on ETCO2 values?</p> <p>A pt age B pt weight C metabolism D main or microstream capnography</p>
<p>52. PM's transporting intubated pt w/ head injury to level-1 TC. BP 186/74, P 62, R 10-assisted, O2 sat 98%, ETCO2 = 25. What should PM's do?</p> <p>A Increase rate/depth of ventilation B Assess for excessive ventilation depth C Make no change in ventilation rate/depth</p>	<p>53. PM's transporting intubated pt w/ chest injury to level-1 TC. BP 70/40, P 126, R 10-assisted, O2 sat 98%, ETCO2 = 25. What should PM's do?</p> <p>A Increase rate/depth of ventilation B Decrease rate/depth of ventilation C Assess for too shallow ventilation depth D Make no change in ventilation rate/depth</p>	<p>54. PM's transporting intubated pt w/ head injury to level-1 TC. BP 76/52, P 112, R 10-assisted, O2 sat 98%, ETCO2 = 25. What should PM's do?</p> <p>A Increase rate/depth of ventilation B Decrease rate/depth of ventilation C Assess for too shallow ventilation depth D Make no change in ventilation rate/depth</p>
		
<p>55. What does the circled area represent?</p> <p>A baseline B inspiration C exhalation D ETCO2 value</p>	<p>56. What does the circled area represent?</p> <p>A baseline B inspiration C exhalation D value</p>	<p>57. What does the circled area represent?</p> <p>A baseline B inspiration C exhalation D ETCO2 value</p>
<p>Answers to the following questions may be found on pages 13-23 of the class handout</p>		
<p>58. According to research, which is the MOST reliable method to confirm correct ETT placement?</p> <p>A Auscultation B Capnography C Pulse oximetry D Fogging of ET tube</p>	<p>59. Research demonstrates capnography may be used to help predict children in DKA; what was the researchers finding?</p> <p>A No pt w/ DKA had an ETCO2 above 36 B No pt w/ DKA had an ETCO2 less than 45 C Pts w/ DKA had normal ETCO2 levels D Pts w/ DKA usually had ETCO2 levels greater than 45</p>	<p>60. By what method do some anesthesiologists check capnography equipment?</p> <p>A Use own expired breath B Use sodium bicarbonate C Use carbon monoxide cannisters D Attach capno sensor to oxygen supply</p>