Video Quiz

Video Title: Confined Space Safety II
Length: 25 min.
Vendor: Tel-A-Train

1. Most deaths in confined spaces are due to atmospheric hazards. True__, False__
2. The three types of atmospheric hazards that are a concern in confined spaces are: ______________ deprivation, ______________ gases, and ______________ gases.
3. Confined spaces are spaces not designed for human occupancy. True__, False__
4. Direct reading instruments usually give instantaneous readings. True__, False__
5. Two major categories of instruments are a) __________ detectors, and b) __________ tubes.
6. Most flammable gas detectors are affected by cross-sensitivity. True__, False__
7. Cross-sensitivity may be advantageous in flammable gas detectors. True__, False__
8. Gas detector tubes and toxic gas sensors tend to be more specific than flammable gas detectors. True__, False__
9. Other gases or vapors may increase or decrease an instruments ability to detect the toxic gas it is designed to detect. True__, False__
10. Detector tubes come calibrated from the factory. True__, False__
11. Detector tubes must only be used with the pump designed for them. True__, False__
12. Detector tubes usually measure the length of stain produced when a certain volume of gas is drawn through them at a specified rate. True__, False__
13. Detector tubes should be stored in a cool, dry place. True__, False__
14. Detector tubes should be discarded after a period of time. True__, False__
15. Detector tubes have the disadvantage of not giving a continuous reading or sounding an alarm when the concentration is too high. True__, False__
16. Detector tubes only give a time-weighted average concentration for the time period over which the sample is collected – usually a few seconds. True__, False__
17. Detector tubes have an advantage over electronic detectors of usually giving readings that are in the ball park. True__, False__
18. Electronic detectors may be off by more than 1000% of the true reading. True__, False__
19. Detector tubes are almost always withing +/- 50% of the true reading.
20. Detector tube pumps must be checked regularly for leaks. True__, False__
21. Electronic detectors must be calibrated regularly. True__, False__
22. Correct calibration can only be achieved if the instrument is zeroed first and the zero is checked again after calibration. True__, False__
23. Zeroing is usually done most accurately by passing zero nitrogen through the instrument and setting the needle to zero. True__, False__
24. Calibration involves passing a gas of known concentration through the instrument and adjusting the scale. True__, False__
25. When calibrating with a single calibration gas, the concentration of the calibration gas should be roughly 80% of full scale. True__, False__
26. When calibrating with a single calibration gas, the assumption is automatically made that the instrument is producing a linear response to the gas being measured. True__, False__
27. Oxygen sensors must usually be replaced once each year. True__, False__
28. Electronic sensors can be damaged by a)dropping, b)exposure to certain gases or vapors, c)overexposure to the gas being sensed.
29. A good way to calibrate a flammable gas detector is to open the gas cap on your car and hold the probe inside the neck to the tank. True__, False__
30. An oxygen meter should read 16% in outside air. True__, False__
31. A good way to check for leaks in an electronic detector is to hold you finger over the end of the probe and see if the pump slows down. True__, False__
32. Indicate by the letter U or D which gases will go up or go down in a confined space.
   a. Hydrogen (H₂)-- _____
   b. Methane (CH₄) -- _____
   c. Acetylene (C₂H₂)-- _____
   d. Air -- _____
   e. Hydrogen sulfide (H₂S) --___
   f. Benzene (C₆H₆) --____
   g. Gasoline (Large molecule) -- ___
   h. Propane (C₃H₈) -- ___

33. It is important to test all heights and locations in a confined space. True__, False__

34. Good ventilation is even better than testing to ensure that a confined space is safe. True__, False__

35. Name two hazards to the person removing a cover from a confined space. ________________ and ________________

36. The maximum line length you should use when probing with an electronic instrument is about: a)10 feet, b)20 feet, c)40 feet, d)60 feet, e)80 feet.

37. An instrument that is introduced into a confined space should be ____________________ safe.

38. Oxygen is always adequate in a confined space because it diffuses so rapidly into the space when opened. True__, False__

39. Symptoms of oxygen deprivation include a)depression, b)euphoria, c)headache, d)difficulty breathing, e)ringing in the ears, f)inability to make decisions.

40. Too much oxygen is a confined space is not a concern. True__, False__

41. The minimum acceptable oxygen concentration in a confined space is: a) 21 %, b) 19.5 %, c) 18.5 %, d)16.5%, e)12.5%.

42. Oxygen in a confined space can be depleted by a)breathing, b)iron rusting, c)combustion, d)displacement.

43. Oxygen can collect in your clothing or in your hair making them very flammable. True__, False__

44. Oxygen is a good substitute for air in ventilating a confined space. True__, False__

45. Some flammable gas sensors will not work if the oxygen concentration is low. True__, False__

46. Most flammable gas detectors measure the %LEL. True__, False__

47. %LEL and volume % are the same. True__, False__

48. Most flammable gas detectors alarm at 10% LEL. True__, False__

49. If the needle on a flammable gas detector goes to the top of the scale and remains stable or fluctuates, you are likely in an explosive atmosphere. True__, False__

50. If the needle goes to the top and drops to zero, you are likely in an explosive atmosphere. True__, False__

51. It is important to know which flammable gases are likely to be present and how the detector responds to each. True__, False__

52. Once you’re above the LEL, you have a high potential for an explosion, regardless of whether or not the UEL (upper explosive limit) is exceeded. True__, False__

53. Hydrogen and acetylene are not detected by many flammable gas detectors. True__, False__

54. To detect acetylene, a detector must be rated for Group A. True__, False__

55. To detect hydrogen, a detector must be rated for Group B. True__, False__

56. You should never use a flammable gas detector to test for toxics, even if it tests for carbon monoxide and hydrogen sulfide. True__, False__

57. The two most common toxic gases in confined spaces are ______________________ and ____________________.

58. Carbon monoxide can be tasted and smelled. True__, False__

59. Carbon monoxide asphyxiates a person. True__. False__

60. The MSHA PEL (8 hour time weighted average exposure limit) for carbon monoxide is 50 ppm. True__, False__

61. The MSHA PEL (8 hour time weighted average exposure limit) for hydrogen sulfide is 10 ppm. True__, False__

62. Hydrogen sulfide smells like rotten eggs. True__, False__

63. Hydrogen sulfide exposure rapidly deadens the person’s ability to smell it. True__, False__