



To Hell and Back IV: Cyanide

Test Questions

1. Hydrogen cyanide is a deadly fire gas, over 30 times more toxic than CO.
 - a. True
 - b. False
2. Hydrogen cyanide is generated during the combustion process; anytime hydrogen, nitrogen and carbon are present.
 - a. True
 - b. False
3. Smoke inhalation accounts for approximately what percentage of fire related deaths in the US?
 - a. 10%
 - b. 25%
 - c. 50%
 - d. 80%
4. The _____ pick up oxygen from the lungs and carry it throughout the body in the blood.
 - a. White blood cells
 - b. Red blood cells
 - c. Mitochondria
 - d. Capillaries
5. Which of the following statements most closely describes how cyanide adversely affects the human body?
 - a. Cyanide directly impacts the cells by disabling their ability to convert oxygen into usable energy
 - b. Cyanide makes the blood too thick to be pumped throughout the body
 - c. Cyanide causes destruction of the lung tissue due to its inherent corrosive nature
 - d. Cyanide causes the lungs to malfunction because it is heavier than air
6. An acute cyanide exposure can cause any or all of the following symptoms: rapid breathing initially, then difficult or slow breathing with prolonged exposure; slow or fast heartbeat; giddiness; dizziness
 - a. True
 - b. False
7. The "toxic twins" of smoke inhalation are
 - a. Carbon dioxide and carbon monoxide
 - b. Carbon monoxide and carboxyhemoglobin
 - c. Carbon monoxide and cyanide
 - d. Carbon monoxide and lactic acid



8. It is difficult to distinguish between exposure to carbon monoxide and cyanide
 - a. True
 - b. False
9. People exposed to low levels of cyanide over a long period of time will have chronic symptoms that may include: chronic lung problems, heart arrhythmias, stroke, paralysis.
 - a. True
 - b. False
10. On average, approximately how many breaths of air are there per 100 psi in a 4.5 size, 30-minute air bottle?
 - a. 26 - 30
 - b. 20 - 24
 - c. 14 - 18
 - d. 8 - 12
11. Generally, when training with SCBA, what type of training is typically least addressed?
 - a. Donning properly
 - b. Maintenance
 - c. Breathing properly
 - d. Mask confidence
12. NFPA standard #1584 addresses fire fighter rehab at the **scene**.
 - a. True
 - b. False
13. During overhaul, a multi-gas meter is recommended to be used
 - a. Any time personnel are in the structure
 - b. Until PPV has been set up
 - c. Until oxygen reading is above 20%
 - d. Until a low CO reading is obtained
14. Which of the following is an indicator for suspecting that a person may need treatment for a cyanide exposure due to smoke inhalation?
 - a. Rescue from a closed space structure fire; no second degree burns; altered mental status
 - b. Rescue from a closed space structure fire; mild headache; complaints of nausea
 - c. Rescue from a closed space structure fire; soot in the nose or mouth; altered mental status
 - d. Rescue from a closed space structure fire; chest pain; rapid breathing
15. Anytime treatment is considered for smoke inhalation, treatment for cyanide poisoning should also be considered.
 - a. True
 - b. False