



www.FireSMOKE.org

**To Hell and Back IV: Cyanide
Pre-Test**

Name: _____

Department: _____

1. Hydrogen cyanide is a deadly fire gas, over 30 times more toxic than CO?
 - a. T
 - b. F

2. Hydrogen cyanide is generated during the combustion process; anytime hydrogen, nitrogen and carbon are present?
 - a. T
 - b. F

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 _____ pickup 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. T
 - b. F

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. T
 - b. F

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. T
 - b. F

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 firefighter rehab at the scene?
- T
 - F
13. During overhaul, a multi-gas meter is recommended to be used
- any time personnel are in the structure
 - until PPV has been set up
 - until oxygen reading is above 20%
 - 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?
- Rescue from a closed space structure fire; no second degree burns; altered mental status
 - Rescue from a closed space structure fire; mild headache; complaints of nausea
 - Rescue from a closed space structure fire; soot in the nose or mouth; altered mental status
 - 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.
- T
 - F