

Quiz for Module 2: **Exposure Incidents and Health Effects of CO₂**

Name (please print): _____

Date: _____

1. CO₂ in the atmosphere is at a concentration of:
 - a. 20.9 % (209,000 ppm)
 - b. 0.8% (8,000 ppm)
 - c. 0.04% (400 ppm)
 - d. 7% (70,000 ppm)

2. When CO₂ is dissolved in water it forms a weak base in solution (mildly increases the pH). True and false

3. In the presence of normal oxygen levels death can occur within five minutes at which concentration of CO₂ in air?
 - a. 7%
 - b. 20.9%
 - c. 0.04%
 - d. 0.8%

4. Oxygen is necessary to carry out cell functions. Breathing is stimulated by excessive CO₂ in the blood. True or False

5. All the following are symptoms of overexposure to CO₂ except:
 - a. Headaches
 - b. Nausea
 - c. Increased heart rate
 - d. Cold, clammy skin
 - e. Cardiac arrhythmia
 - f. Hearing loss
 - g. Ringing in the ears
 - h. Lack of concentration

6. Acidosis is what?
 - a. CO₂ levels in the blood become excessive
 - b. Greater than 3% CO₂ is exhaled through the lungs
 - c. CO₂ generates cell metabolites in the blood

- d. Caused by extreme stress
7. Adverse cognitive effects from CO₂ have been observed as low as what concentration in air: (choose the best answer)
- a. 5,000 ppm over 8 hours
 - b. 1,000 ppm over 2.5 hours
 - c. 2,500 ppm over 2.5 hours
 - d. 500 ppm over 60 minutes
8. Nitrogen, argon, and carbon dioxide are all asphyxiant gases. True or False
9. The federal agency responsible for assuring the safety and health of United States workers is:
- a. NIOSH
 - b. ACGIH
 - c. OSHA
 - d. WHO
10. The adverse effects of overexposure to carbon dioxide can be permanent.
True or False

Answer Key

- 1. C**
- 2. False**
- 3. A**
- 4. True**
- 5. D**
- 6. A**
- 7. B**
- 8. True**
- 9. C**
- 10. True**