



Emergency Oxygen

CHAPTER 2 REVIEW QUESTIONS

- Oxygen is a clear, odourless gas essential to life**
 - True
 - False
- The atmospheric air we inhale contains ____ % oxygen**
 - 12
 - 16
 - 21
 - 27
- The air we exhale contains ____ % oxygen**
 - 12
 - 16
 - 21
 - 27
- Oxygen is carried throughout the body by**
 - white blood cells
 - red blood cells
 - bone marrow
 - blood plasma
- Carbon dioxide is**
 - a waste product of metabolism
 - a toxic gas
 - essential for life
 - an inert gas
- Nitrogen comprises ____% atmospheric air**
 - 21
 - 27
 - 67
 - 78
- Carbon monoxide is**
 - a waste product of metabolism
 - a toxic gas
 - essential for life
 - an inert

CHAPTER 3 REVIEW QUESTIONS

- Hypoxia is a condition of low oxygen supply**
 - True
 - False
- An absence of oxygen**
 - may cause cell death
 - is known as anoxia
 - may cause unconsciousness
 - all of the above
- Gas exchange takes place at the**
 - vein-artery interface
 - long bone joints
 - alveolar-capillary membrane
 - muscle-nerve junctions
- The respiratory system includes the**
 - heart, lungs, brain
 - arteries, spinal cord, nose
 - nose, trachea, lungs
 - bones, muscles, skin
- The cardiovascular system includes the**
 - veins, arteries, heart
 - mouth, lungs, stomach
 - skin, bones, muscles
 - nose, lungs, pharynx

CHAPTER 4 REVIEW QUESTIONS

- 1. Decompression illness (DCI) includes**
 - a. decompression sickness (DCS)
 - b. arterial gas embolism (AGE)
 - c. both of the above
- 2. The most important initial actions in responding to diving accidents are to recognise there is a problem and administer 100% oxygen**
 - a. True
 - b. False
- 3. DCS is caused by**
 - a. breath-hold during descent
 - b. breath-hold during ascent
 - c. inert gas bubbles in the body
- 4. The primary risk factor for AGE is**
 - a. breath-hold during descent
 - b. breath-hold during ascent
 - c. inert gas bubbles in the body
- 5. It is important to seek proper medical evaluation in cases of suspected DCI since**
 - a. symptom resolution with oxygen first aid does not mean DCI has been resolved
 - b. symptoms may return without hyperbaric treatment
 - c. recurrence of symptoms may be reduced with hyperbaric treatment
 - d. all of the above
- 6. The single most common symptom of DCI is**
 - a. numbness
 - b. constitutional (fatigue, nausea)
 - c. muscle weakness
 - d. pain
 - e. issue with balance/equilibrium
- 7. Initial DCS symptoms**
 - a. occur within 15 minutes of the time of injury
 - b. typically occur within six hours of surfacing
 - c. may be delayed up to 24 hours
 - d. both b and c
- 8. AGE symptoms**
 - a. occur within 15 minutes of the time of injury
 - b. typically occur within six hours of surfacing
 - c. may be delayed up to 24 hours
 - d. both b and c
- 9. Returning to diving following decompression illness should be done in conjunction with a physician knowledgeable in dive medicine**
 - a. True
 - b. False

CHAPTER 5 REVIEW QUESTIONS

- 1. Providing a high concentration of oxygen to an injured diver may provide these benefits**
 - a. acceleration of inert-gas elimination
 - b. reduce bubble size
 - c. enhance oxygen delivery to tissues
 - d. reduce swelling
 - e. all of the above
- 2. The primary goal of providing the highest concentration of oxygen possible to an injured diver is to facilitate inert-gas washout and improve oxygen delivery to compromised tissues**
 - a. True
 - b. False

3. **Percentage of oxygen delivered when using a demand valve is influenced by**
 - a. flow rate and mask fit
 - b. mask fit and mask seal
 - c. mask seal and flow rate
4. **The initial flow rate for constant-flow oxygen delivery is**
 - a. 2-4 lpm
 - b. 10-15 lpm
 - c. 20-25 lpm
 - d. the rate the injured diver will tolerate
5. **In remote areas, the priority in oxygen delivery is**
 - a. to conserve oxygen supplies
 - b. to maximise highest inspired fraction of oxygen
 - c. limit the flow of oxygen
6. **Oxygen toxicity, whether CNS or pulmonary, is not a concern when providing oxygen first aid to an injured diver**
 - a. True
 - b. False
7. **Which of the following is not a symptom of non-fatal drowning**
 - a. difficulty breathing
 - b. rapid pulse
 - c. cyanosis (bluish coloured lips)
 - d. abdominal distention
 - e. chest pain
8. **As a first responder to a non-fatal drowning, your primary role is to**
 - a. monitor vital signs
 - b. provide supplemental oxygen
 - c. transport victim to the nearest medical facility
 - d. all of the above
9. **In the event of an unresponsive drowning victim requiring CPR, begin with rescue breaths and follow the ABC protocols of CPR**
 - a. True
 - b. False

CHAPTER 6 REVIEW QUESTIONS

1. **Oxygen is one element of the fire triangle**
 - a. True
 - b. False
2. **The risks of handling oxygen can be reduced by**
 - a. keeping the oxygen units free of hydrocarbons found in oils and lubricants often kept on dive boats
 - b. slowly opening the oxygen cylinder
 - c. keeping the unit away from the heat of the sun
 - d. all of the above
3. **Contact with grease and exposure to high temperatures are of no concern with oxygen equipment**
 - a. True
 - b. False
4. **With what grade of oxygen should an oxygen cylinder for diving first aid be filled?**
 - a. aviator or industrial grade
 - b. medical grade only
 - c. medical or industrial grade
 - d. aviator or medical grade
5. **Methods for obtaining oxygen fills may include**
 - a. prescription
 - b. documentation of training in oxygen
 - c. delivery
 - d. prospective prescription
 - e. all of the above

6. When should an oxygen unit's components and cylinder pressure be checked?

- a. every two years
- b. before every outing
- c. every week
- d. annually

7. An oxygen unit should be stored

- a. with the valve closed
- b. in its protective case
- c. assembled
- d. all of the above

8. It is not necessary to clean oxygen parts and masks

- a. True
- b. False

CHAPTER 7 REVIEW QUESTIONS

1. Which of the following is not part of an oxygen delivery systems

- a. oxygen cylinder
- b. pressure-reducing regulator
- c. lubricants to facilitate assembly
- d. oxygen hose
- e. face mask

2. What is the primary consideration when choosing an oxygen cylinder?

- a. capacity
- b. distance to medical aid
- c. cylinder markings

3. A multifunction regulator is preferred in emergency oxygen for scuba diving injuries because it can provide emergency oxygen to two injured divers at once

- a. True
- b. False

4. An oxygen cylinder should be switched during care when the pressure drops below 200 psi if another cylinder is available or, if another cylinder is not available, use the cylinder until it is empty

- a. True
- b. False

5. Oxygen cylinders are subject to periodic visual and hydrostatic testing

- a. True
- b. False

6. Oxygen cylinder marking colours are standardised throughout the world to avoid confusion

- a. True
- b. False

7. Oxygen regulators are fitted with a pin indexing system to prevent use on other cylinder valves that may not contain oxygen

- a. True
- b. False

8. A demand valve flows only when the injured diver inhales, allowing the oxygen to last longer

- a. True
- b. False

9. A bag valve mask

- a. is a self-inflating bag with a mask that aids in rescue breathing
- b. has a manual trigger that initiates oxygen flow
- c. is best used by two rescuers working together
- d. a and c

10. Manually triggered ventilators

- a. allow rescuers to deliver high concentrations of oxygen to non-breathing or inadequately breathing divers
- b. can also function as a demand valve
- c. is best used by two rescuers
- d. all of the above

11. A constant flow mask that is recommended when a breathing injured diver cannot activate the demand inhalator valve or when there is more than one injured diver is a

- a. non-rebreather mask
- b. oronasal resuscitation mask
- c. bag valve mask



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