

Emergency Oxygen

Chapter Review Questions V3.0



Emergency Oxygen

Chapter 2 Review Questions

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



Emergency Oxygen

Chapter 3 Review Questions

- Hypoxia is a condition of low oxygen supply.
a. True b. False

- An absence of oxygen
a. may cause cell death
b. is known as anoxia
c. may cause unconsciousness
d. all of the above
- Gas exchange takes place at the
a. vein-artery interface
b. long bone joints
c. alveolar-capillary membrane
d. muscle-nerve junctions
- The respiratory system includes the:
a. heart, lungs, brain
b. arteries, spinal cord, nose
c. nose, trachea, lungs
d. bones, muscles, skin
- The circulatory system includes the:
a. veins, arteries, heart
b. mouth lungs, stomach
c. skin, bones, muscles
d. nose, lungs, pharynx



Emergency Oxygen

Chapter 4 Review Questions

- Decompression illness (DCI) includes
a. decompression sickness (DCS)
b. arterial gas embolism (AGE)
c. both of the above
- The most important initial actions in responding to diving accidents are to recognize there is a problem and administer 100 percent oxygen.
a. True b. False
- DCS is caused by
a. breath-hold during descent
b. breath-hold during ascent
c. inert gas bubbles in the body
- The primary risk factor for AGE is
a. breath-hold during descent
b. breath-hold during ascent
c. inert gas bubbles in the body
- 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:

- numbness
- constitutional (fatigue, nausea)
- muscle weakness
- pain
- balance/equilibrium

7. Initial DCS symptoms

- occur within 15 minutes of the time of injury
- typically occur within six hours of surfacing
- may be delayed up to 24 hours
- both b and c

8. AGE symptoms

- occur within 15 minutes of the time of injury
- typically occur within six hours of surfacing
- may be delayed up to 24 hours
- both b and c

9. People who received first aid for suspected DCI should always receive a follow-up evaluation by a dive medicine physician.

- True
- False

10. Returning to diving following DCI should be done in conjunction with a physician knowledgeable in dive medicine

- True
- False



Emergency Oxygen

Chapter 5 Review Questions

- The primary goal of delivering the highest concentration of oxygen possible to an injured diver is to facilitate inert gas washout and improve oxygen delivery to compromised tissues.
 - True
 - False
- Providing a high concentration of oxygen to an injured diver may provide these benefits:
 - accelerate inert gas elimination
 - reduce bubble size
 - enhance oxygen delivery to tissues
 - reduce swelling
 - all of the above
- Symptoms of nonfatal drowning may include
 - difficulty breathing
 - abdominal distension
 - chest pain
 - hyperthermia
 - all but d
- In the event of an unresponsive drowning victim requiring CPR, begin with ventilations and follow the ABC protocols of CPR.
 - True
 - False

5. As a first responder to a nonfatal drowning, your role is to

- monitor vital signs
- provide supplemental oxygen
- transport to the nearest medical facility
- all of the above

6. The initial flow rate for constant-flow oxygen delivery is

- 2-4 lpm
- 10-15 lpm
- 20-25 lpm
- the rate the injured diver will tolerate

7. The percentage of oxygen delivered when using a demand valve is influenced by

- flow rate
- mask fit
- mask seal
- both b and c

8. In remote areas, the priority in oxygen delivery is

- to conserve oxygen supplies
- to maximize the highest inspired fraction of oxygen
- limit the flow of oxygen

9. Oxygen toxicity, whether CNS or pulmonary, is not a concern for oxygen first aid administered to an injured diver.

- True
- False



Emergency Oxygen

Chapter 6 Review Questions

- Oxygen is one element of the fire triangle.
 - True
 - False
- Safety precautions to implement when using oxygen cylinders include
 - not allowing any oil or grease to come in contact with oxygen cylinder
 - not exposing oxygen cylinders to high temperatures or allow smoking/open flames around oxygen
 - providing adequate ventilation when using oxygen
 - using only equipment made for use with oxygen
 - all of the above
- With what grade of oxygen should an oxygen cylinder for diving first aid be filled?
 - aviator or industrial grade
 - medical grade only
 - medical or industrial grade
 - aviator or medical grade

4. Methods for obtaining oxygen fills may include
 - a. prescription
 - b. documentation of training in oxygen delivery
 - c. prospective prescription
 - d. any of the above
5. 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
6. An oxygen unit should be stored
 - a. with the valve closed
 - b. in its protective case
 - c. assembled
 - d. all of the above
7. It is not necessary to clean oxygen parts and masks.
 - a. True
 - b. False



Emergency Oxygen

Chapter 7 Review Questions

1. Which of the following is not part of an oxygen delivery system?
 - 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. number of injured divers
 - 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 the same time.
 - 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 hydrostatic testing.
 - a. True
 - b. False
6. Oxygen cylinder marking colors are standardized 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 providing ventilations
 - b. is 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 nonbreathing or inadequately breathing divers
 - b. also function as a demand valve
 - c. are 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. nonrebreather mask
 - b. oronasal resuscitation mask
 - c. bag valve mask