



The following questions have only one correct answer.

Duty of Care and Emotional Stress

1. A first-aid responder
 - a. has a legal obligation to provide care
 - b. must act within the scope of their training
 - c. may have an obligation to notify authorities that someone is in need of assistance
 - d. b and c only
2. A rescuer should always ask permission before providing care
 - a. True
 - b. False
3. Anxiety during an emergency is a normal reaction
 - a. True
 - b. False

Basic Sciences

4. The circulatory system is comprised of
 - a. heart, lungs, nerves
 - b. lungs, stomach, liver
 - c. arteries, veins, heart
 - d. all of the above
5. The respiratory system provides for gas exchange in the body
 - a. True
 - b. False
6. Hypoxia is a condition of low oxygen supply in the body
 - a. True
 - b. False
7. Gas exchange takes place at the:
 - a. Trachea and intrapulmonary bronchi
 - b. long bone joints
 - c. alveolar-capillary membrane
 - d. muscle-nerve junctions
8. The brain, spinal cord and nerves make up the:
 - a. circulatory system
 - b. respiratory system
 - c. nervous system
 - d. skeletal system

9. The atmosphere is composed of what percent of oxygen, nitrogen and inert gases?
 - a. 21% O₂, 78% N₂, 1% inert gases
 - b. 15% O₂, 65% N₂, 20% inert gases
 - c. 25% O₂, 74% N₂, 1% inert gases
 - d. 33% O₂, 33% N₂, 34% inert gases
10. The primary cause for decompression sickness (DCS) is:
 - a. dehydration and cold water.
 - b. heavy exertion before diving.
 - c. heavy exertion after diving.
 - d. inert gas bubbles in the body
11. Symptoms of decompression illness may include:
 - a. dizziness/vertigo
 - b. motor weakness
 - c. pain, numbness or tingling
 - d. All of the above.
12. Symptoms of AGE and DCS differ in that:
 - a. DCS symptoms typically occur within 6 hours
 - b. AGE symptoms occur within 15 minutes
 - c. AGE symptoms may be delayed up to 24 hours
 - d. both a and b
13. The primary risk factor for AGE is
 - a. breath hold during ascent
 - b. breath hold during descent
 - c. inert gas bubbles in the body
 - d. all of the above

Dive Emergency Preparation

14. The Bloodborne Pathogens Standard provides for training to assist with understanding of:
 - a. the need for protection from blood borne pathogens
 - b. the options for protection
 - c. what to do if an exposure occurs
 - d. all of the above
15. Personal protective equipment which can help prevent infection while providing care includes:
 - a. gloves
 - b. mask or face shield for CPR
 - c. resuscitation mask
 - d. all of the above

16. Diseases which can be transmitted by BBP include:
 - a. Hepatitis B and C
 - b. Influenza
 - c. HIV
 - d. a and c only
17. If you believe you have been exposed to a BBP, you should schedule an appointment only if symptoms present.
 - a. True
 - b. False
18. An Emergency Action Plan is a vital resource in an emergency.
 - a. True
 - b. False
19. An injured diver should be transported to:
 - a. the nearest hyperbaric facility
 - b. the nearest medical facility
 - c. their personal primary care physician
 - d. any of the above
20. Reasons to move an injured person include:
 - a. imminent danger
 - b. to make providing care easier
 - c. to provide CPR
 - d. a. and c. only

Response and Assessment

21. The mnemonic S-A-F-E is used to:
 - a. protect the rescuer from injury or impairment
 - b. assist with assessing circumstances surrounding the injured person
 - c. remind the rescuer of important equipment and supplies
 - d. all of the above
22. During initial assessment, you should
 - a. identify yourself and your training as a first-aid provider
 - b. tap and shout "are you OK?"
 - c. determine if there is normal breathing (and pulse if trained)
 - d. all of the above
23. Assess for normal breathing
 - a. by scanning the injured diver for movement
 - b. looking for changes in skin color
 - c. while doing a pulse check (if trained to do so)
 - d. all of the above

24. A breathing injured diver who is in danger of vomiting should be placed
 - a. in the supine position (on their back).
 - b. in someone else's boat.
 - c. in the recovery position (on their side with the head supported).
 - d. in a litter and made ready for helicopter evacuation.
25. Stroke symptoms include
 - a. inability to speak or understand
 - b. visual disturbances
 - c. sudden loss of motor function
 - d. all of the above
26. Stroke is the number one cause of long term disability.
 - a. True
 - b. False
27. F-A-S-T stands for
 - a. facts, attitude, sensitivity, talent
 - b. face, arms, speech, time
 - c. feet, arms, spine, toes
 - d. face, ankles, stability, touch
28. F-A-S-T is a quick assessment to determine if a neurological injury is a possibility. If any portion of the assessment shows deficits, EMS should be called immediately
 - a. True
 - b. False
29. Taking a history helps determine if signs and symptoms present may be due to a previous injury or illness.
 - a. True
 - b. False
30. For injuries related to a scuba diving incident, you should document
 - a. all dives for 24 hours before the injury
 - b. symptom onset time
 - c. pre-existing conditions
 - d. all of the above
31. Conducting a neurological assessment may convince an injured diver of the need for oxygen first aid.
 - a. True
 - b. False

32. The neurological assessment should be repeated every _____ minutes, barring evident changes in the individual's condition.
- a. 15
 - b. 30
 - c. 60
 - d. There is no need to repeat the exam.
33. Neurological symptoms tend to be fixed when they develop and never change until definitive treatment is initiated.
- a. True
 - b. False
34. Information gathered during a neurological assessment may help the individual's physician understand the extent of the injury and determine how it has changed over time.
- a. True
 - b. False

Oxygen First Aid in Scuba Diving Injuries

35. The primary reason to provide the highest concentration of oxygen possible is to speed inert gas washout/removal and to slow symptom progression.
- a. True
 - b. False
36. The percentage of oxygen delivered when using a demand valve is influenced by
- a. flow rate
 - b. mask fit
 - c. mask seal
 - d. both b and c
37. A diver with suspected decompression illness may benefit from breathing 100 percent inspired oxygen before medical treatment because
- a. symptoms may be relieved and results of recompression treatment may be enhanced
 - b. it may make recompression treatment unnecessary
 - c. oxygen stimulates breathing
 - d. all of the above

38. When choosing an oxygen cylinder for use in a diving emergency, what should you consider?
 - a. type of oxygen delivery device or mask
 - b. cylinder capacity
 - c. time and distance to the next level of emergency response
 - d. all of the above
39. When faced with a fellow diver who presents with symptoms that might be related to DCI, the correct course of action may include
 - a. placing them on oxygen
 - b. alerting EMS first then calling DAN
 - c. getting the diver to a medical facility
 - d. all of the above
40. The dive boat is ninety minutes from shore and your emergency oxygen unit has a single full oxygen cylinder that will only last one hour. When providing oxygen first aid to a breathing injured diver with suspected DCI, you should use the
 - a. demand inhalator valve continuously for as long as the oxygen supply lasts
 - b. non-rebreather mask at a reduced flow rate so that the oxygen will last
 - c. oronasal resuscitation mask at a minimum continuous flow rate of 10 lpm
 - d. demand inhalator valve only until the injured diver feels better
41. In a diving incident, it is not necessary to distinguish between decompression sickness and arterial gas embolism.
 - a. True
 - b. False.
42. The delivery system that delivers the highest possible concentration of inspired oxygen to a breathing injured diver is the
 - a. nasal cannula
 - b. oronasal resuscitation mask with supplemental oxygen
 - c. non-rebreather mask
 - d. demand inhalator valve and mask
43. Oxygen cylinders should be switched during care when the pressure drops below 200 psi if another cylinder is available.
 - a. True
 - b. False

Cardiopulmonary Resuscitation

- 44. The goal of CPR is to maintain adequate circulation of oxygenated blood to vital organs.
 - a. True
 - b. False
- 45. Chest compressions temporarily take over the function of the heart.
 - a. True
 - b. False
- 46. The sequence for CPR is CAB. This stands for
 - a. circulation, airway, breathing
 - b. call for help, assess, back away
 - c. carry to a safe place, activate EMS, begin compression
 - d. cardiac defibrillation, activate emergency action plan, begin compression
- 47. The first link in the chain of survival is
 - a. rapid initiation of CPR
 - b. rapid activation of EMS
 - c. post cardiac arrest care
 - d. advanced life support
- 48. Warning signs of a heart attack include
 - a. heavy pressure in chest, arm and neck pain
 - b. sudden rash, indigestion, heartburn
 - c. nausea, vomiting, sweating
 - d. a and c
- 49. Activate EMS
 - a. immediately for an adult if you are alone
 - b. after 2 minutes of CPR for children and drowning victims
 - c. after 10 minutes of CPR regardless of age
 - d. a and b
- 50. Rapid initiation of CPR is not necessary for most individuals. Wait for a response by EMS before taking action.
 - a. True
 - b. False
- 51. Once CPR has been initiated, any interruptions to chest compressions should be limited to
 - a. less than 10 seconds
 - b. 10-15 seconds
 - c. 20-25 seconds
 - d. 30-35 seconds

52. What is the recommended rate per minute for chest compressions?
- as fast as you can push
 - 100-120
 - 70-80
 - 150-180
53. Chest compressions on an adult should be delivered to a depth of
- 1 ½ -2" (3-3.5 cm)
 - 2-2 ½" (5-6 cm)
 - 3-3 ½" (7.5-8 cm)
 - Depth is not important as long as compressions are being done.
54. If chest compressions are too fast
- the heart cannot adequately refill with blood
 - blood flow to vital organs is decreased
 - rescuer fatigue occurs more quickly
 - all of the above
55. Chest compressions-to-ventilations ratio for two-person CPR on an adult is 30:2.
- True
 - False
56. Chest compressions on a child can be performed with one or two hands depending on the
- age of the child
 - size of the child
 - presence of a parent or guardian
 - presence of a second rescuer
57. Infant compressions are performed
- to 1/3 of the infant's chest depth
 - at a rate of 100-120 compressions per minute
 - only as a two rescuer team
 - a and b
58. The compressions to ventilation ratio for two-person CPR on children and infants changes to 15:2.
- True
 - False
59. What is the most effective way to open the airway for rescue breathing?
- Keep the head still and open the mouth.
 - Tilt the head back while lifting the chin.
 - Tilt the head back while flexing the neck with your hand.
 - They all work just fine.

60. Most barrier devices are ineffective for delivering rescue ventilations and should not be used.
- True
 - False
61. Rescue breaths should be given for about _____ second(s) using a _____ breath to make the chest rise.
- 2, deep
 - 1, normal
 - 1, deep
 - 2, normal
62. The volume of rescue breaths on a child should be adjusted down.
- True
 - False
63. Opening an infant's airway only requires a gentle tip of the infant's head for rescue breathing.
- True
 - False
64. Ventilations for an infant require
- half the time as ventilation for an adult
 - a much smaller volume of air than for adults or children
 - whatever it takes to be effective
 - none of the above
65. If you are alone when providing care for a drowning victim
- Perform CPR using the A-B-C protocol for two minutes then call EMS.
 - Call EMS then wait for their support.
 - Use the same protocols as with any unresponsive person.
 - Perform CPR for one minute then reassess the person.
66. A BVM can also be used to ventilate an inadequately breathing diver.
- True
 - False
67. Before using an MTV, its function should be checked by
- breathing from the mask
 - setting the constant flow to 10 lpm
 - testing the safety shut off against the palm of your hand
 - priming the unit with several breaths
68. With either the BVM or MTV, two rescuers are required for effectively ventilations.
- True
 - False

69. The chance of survival in cardiac arrest can decrease by _____ for each minute defibrillation is not available.
- 50%
 - 15-20%
 - 7-10%
 - 25%
70. In a circumstance where CPR has been ongoing and an AED becomes available after four minutes of care, when should you use the AED?
- Immediately - apply pads and follow AED prompts.
 - Continue with CPR until the two minute cycle is up and then apply AED.
 - Wait a little while and see if CPR alone is sufficient.
 - There is no point. It has been too long.
71. You apply an AED and it advises to deliver a shock. What step is the most appropriate after pressing the shock button?
- Turn off the AED so it will not interfere with CPR.
 - Check for breathing.
 - Immediately resume CPR beginning with compressions.
 - Place in recovery position.
72. If a choking victim loses consciousness you should
- begin CPR
 - activate EMS if not already done
 - try to remove objects from throat you cannot see
 - a and b only
73. What are differences between a mild and severe airway obstruction in choking?
- Mild obstruction means the person can effectively cough and should be encouraged to do so.
 - Severe obstruction means the person cannot effectively cough or speak and first-aid intervention must be provided.
 - It does not matter if the choking is mild or severe.
 - a & b only

Secondary Care

74. What is not part of a secondary assessment?
- S-A-M-P-L-E
 - head to toe physical exam
 - ongoing assessment including any changes to initial assessment
 - moving the person to a more comfortable location

75. Heat stroke requires
- a. cool drinks and rest
 - b. aggressive intervention and cooling
 - c. lots of water with salt mixed in
 - d. moving the person to an air conditioned room and see how they do
76. An individual who has become severely hypothermic is at risk for cardiac arrest if not handled gently.
- a. True
 - b. False
77. When splinting a possible fracture or dislocation, you should
- a. manipulate the injury site to a normal position
 - b. apply a very tight fitting splint so no movement is possible
 - c. splint in the position found and only if medical care is not readily available
 - d. apply heat packs and then splint on top of them
78. Splints should be applied so they:
- a. restrict movements of the joints above and below the injury
 - b. restrict the circulation of blood to the affected limb
 - c. amputate the injured limb
 - d. do not need padding for comfort around the site of the injury

First Aid for Hazardous Marine Life Injuries

79. The general categories of marine life injuries are
- a. envenomations
 - b. traumatic injuries
 - c. seafood poisonings
 - d. all of the above
80. An envenomation is a process by which venom or toxin is injected into another creature.
- a. True
 - b. False
81. Marine animal bites are usually the result of
- a. hungry animals
 - b. defensive action by the animal
 - c. humans feeding marine life
 - d. b and c
82. Envenomations occur by means of
- a. spoiled food or bacteria
 - b. improperly stored food
 - c. stings, spines, bites, barbs
 - d. b and c

83. The severity of envenomations is impacted by
- potency and volume of toxin injected
 - time and storage method since the marine animal was caught
 - an individual's health status and sensitivity to the venom
 - a and c
84. First aid for injuries from venomous fish starts with
- applying a dressing and bandage to control bleeding
 - applying topical ointments
 - washing the area thoroughly
 - pain control measures
85. Pressure Immobilization Technique is recommended for which of the following types of injuries?
- lionfish stings, sea urchin punctures and bristle worm contact
 - cone snail, sea snake, blue-ring octopus bites
 - bites from triggerfish, moray eels and grouper
 - bluebottle jellyfish, sea stars and fire coral
86. In general, jellyfish stings should be treated using which of the following sequences?
- treat symptoms, remove tentacles, soak affected area in hot water
 - remove tentacles, rinse with vinegar, and manage pain
 - inactivate nematocysts, remove tentacles, wash area, manage pain
 - manage pain, remove tentacles, and inactivate nematocysts
87. Which is the initial step in first-aid treatment of contact injuries?
- control bleeding
 - wash the area with soap and water
 - getting the injured individual to an emergency room
 - none of the above
88. Irukandji syndrome presents initially as moderate pain, but
- symptoms show a clear progression and get worse
 - can move on to cardiovascular symptoms
 - is rarely fatal but medical support should be pursued
 - all of the above
89. Marine animal bites are of particular concern due to the resulting high volume of blood loss.
- True
 - False
90. Bites from marine animals should be followed up with a medical evaluation because a tetanus booster may be indicated.
- True
 - False

91. Control of external bleeding begins with the use of direct pressure.
a. True
b. False
92. Signs of infection include
a. pain, redness and swelling
b. loss of function and increased heat in the affected area
c. tissue blanching and poor circulation
d. a and b
93. Symptoms of a life threatening allergic reaction include
a. raised, itching rash
b. pus and foul smell
c. airway narrowing and difficulty breathing
d. none of the above
94. Emergency medical services should be called if you suspect a severe allergic reaction.
a. Yes, call immediately.
b. No, wait to see if the symptoms get better.
c. It depends on what triggered the reaction.
d. Most allergies are seasonal and will go away on their own.
95. Which of the following are medical emergencies necessitating immediately calling emergency medical services?
a. sudden, itchy hives; rashes that do not respond to topical ointments
b. accidental contact with fire coral; minor cuts and scrapes
c. anaphylactic shock, cardiogenic shock, hypovolemic shock
d. all of the above
96. Which statement best describes shock?
a. life threatening condition
b. inadequate circulation/oxygenation to tissues
c. emergency requiring immediate first aid
d. all of the above
97. Which is not a common sign/ symptom of shock?
a. cool, sweaty skin
b. rapid and weak pulse
c. weakness or feeling faint
d. hyperactivity
98. Seafood poisoning is the result of
a. toxins stored in skin and muscles of seafood
b. bacteria, parasites, viruses or toxins
c. spoilage from improper storage
d. a. and b.

99. Many contaminants that cause seafood poisoning can be eliminated by thorough cooking.
 - a. True
 - b. False
100. Dive practices that can help you prevent injuries from marine life include
 - a. practicing good buoyancy control and streamlining your equipment
 - b. having situational awareness as you dive and looking up and around as you ascend
 - c. shuffling your feet when entering the water from shore and wearing appropriate exposure protection for environmental risks
 - d. all of the above