

# Lifeguarding Study Guide

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INSTRUCTIONS: The Lifeguarding Study Guide by Ron Arendas, the Water Safety Guy, has been designed to be used with the *American Red Cross Lifeguarding* textbook, available for purchase at your local American Red Cross Chapter. To find the chapter near you, go to [www.redcross.org](http://www.redcross.org) and type in your zip code.

To complete this study guide, print these pages and answer the questions and complete the exercises on these pages while reading the textbook. Be sure to bring a completed copy of the study guide to each Lifeguarding class meeting.

This study guide belongs to: \_\_\_\_\_

## Chapter 1: The Professional Lifeguard

1. The primary responsibility of a lifeguard is to ensure \_\_\_\_\_ and to protect \_\_\_\_\_.
2. In what ways should a professional lifeguard be prepared for his or her job?
3. What different environments employ lifeguards?
4. The certificates you earn in this class will prepare you for working in which environment(s)?

### The FIND Model

5. List one decision that a lifeguard may have to make?
6. The FIND model stands for: **F**igure out the \_\_\_\_\_, **I**dentify possible \_\_\_\_\_, **N**ame the \_\_\_\_\_ and \_\_\_\_\_, and **D**ecide which \_\_\_\_\_ is best.
7. Use the FIND model to come up with a solution for the following scenario: *A mother starts to inflate water wings for her child. You politely tell her that water wings are not allowed in the pool during open swims. She gets very angry and says that other lifeguards have always allowed her child to use them, and her child needs them because he cannot swim. She continues to inflate the water wings. You have already told other patrons that they cannot use flotation devices in the pool. What do you do?*
  - a. What is the problem?
  - b. What are possible solutions? (Name 3 that together represent a broad response.)
  - c. Name the pros and cons for each solution.
  - d. Which solution is best?

## Legal Considerations

8. Match the following terms and descriptions:

- |                           |   |
|---------------------------|---|
| Duty to act _____         | (A) Statutes that generally provide legal protection to people who willingly (without a duty to act) give emergency care without being negligent or accepting anything in return.                           |
| Standard of care _____    | (B) Permission to provide care given by an injured adult or the parent of an injured child to a rescuer or caregiver. This permission is implied when the adult is unresponsive or the child is unattended. |
| Negligence _____          | (C) A form, like an accident report, that describes what was seen, heard, and done during an emergency.   |
| Good Samaritan laws _____ | (D) An unwillingness to receive first aid or medical treatment expressed by a victim (or the victim's parent or guardian) who must give consent.  |
| Consent _____             | (E) A legal responsibility to respond to an emergency while on the job.   |
| Refusal of care _____     | (F) A failure to act or to use reasonable care that results in injury or that causes further harm.  |
| Abandonment _____         | (G) The safeguarding of a victim's right to privacy as it concerns his or her medical condition, etc.   |
| Confidentiality _____     | (H) The failure to continue care once it has been initiated.  |
| Documentation _____       | (I) The benchmark by which the actions of a caregiver with similar training and experience is measured.   |

9. As you keep in mind the legal considerations explained in this chapter, read the following scenario and answer the related questions: *A female patron slips and falls on the deck. She hits her head, and it is lightly bleeding. You ask for consent, but the patron refuses. She says she will get dressed and go home.*

a. What should you do?

*A few minutes after the patron enters the locker room, another patron comes out and says the woman is now unconscious in the locker room.*

b. Should you help the patron now? Why or why not?

**The Lifeguard Team/Management and Professionalism/Maintaining Skills**

10. What is the importance of the lifeguard team?
11. The lifeguard team is part of a larger team – the \_\_\_\_\_ team.
12. What additional resources are part of this larger team?
13. How can facility management support you and promote your professional development?
14. What does certification in American Red Cross Lifeguarding mean? What does it *not* mean?

**Chapter 2: Injury Prevention and Facility Safety**

1. How are lifeguards different than most professional rescuers?
2. What program identifies dangerous conditions or behaviors and takes steps to minimize or eliminate these conditions/behaviors?
3. Knowing what can help lifeguards prevent injuries?
4. What are the two most serious aquatic emergencies to prevent?
5. What are the 3 injury-prevention strategies discussed in this chapter?

**Communicating with Patrons/Enforcing Rules**

6. What 3 things do lifeguards do to communicate safety and prevention to patrons?
7. How are patrons informed about the potential for injury?
8. Write a reason for each of the common pool rules listed below:

| Rule                                      | Reason |
|---|--------|
| Walk; don't run.                          |        |
| No gum chewing in the pool area.          |        |
| No diving into shallow water.             |        |
| One person on the diving board at a time. |        |

9. What 3 steps can you follow to educate patrons?

10. How can lifeguards enforce rules?

### Safety Checks

11. What is a safety check? When are safety checks performed during the day?

12. What should you do if you find an unsafe condition or other problem?

### Weather Conditions

13. Weather affects the \_\_\_\_\_ of swimmers both indoors and outdoors.

14. Where should emergency procedures for severe weather be documented?

15. Lifeguards should clear everyone from the water at the first sound of \_\_\_\_\_  
or the first sight of \_\_\_\_\_.

16. If indoors during a thunderstorm, stay away from what?

17. If outdoors during a thunderstorm, keep away from \_\_\_\_\_,  
keep \_\_\_\_\_, and minimize \_\_\_\_\_.

18. Name weather conditions that pose a safety threat: \_\_\_\_\_;  
that decrease visibility: \_\_\_\_\_; that increase  
hypothermia: \_\_\_\_\_.

19. How can weather affect indoor facilities?

20. TRUE-FALSE:

- a. If you hear thunder, lightning is within striking distance.
- b. During a thunderstorm, it is safe to swim indoors.
- c. It is safe to return to the water 15 minutes after the last flash of lightning.
- d. It is OK to let patrons swim if it is lightly raining as long as there is no lightning and you can see the bottom of the pool.
- e. If a tornado warning has been issued, you should close the pool and send patrons home.
- f. It is OK to let patrons swim indoors during a power failure.

### Management and Safety

21. What obligation does facility management toward employees and the public?
22. And what 6 responsibilities does this obligation entail?

### Chapter 3: Patron Surveillance

1. What are the 4 elements of effective patron surveillance?

### Victim Recognition

2. What are the 4 behaviors used to detect a victim?
3. DISTRESSED/ACTIVE/PASSIVE:
  - a. This victim is usually vertical with thrashing arms, ineffective kick, and head held back:  
\_\_\_\_\_.
  - b. This victim may be exhausted or injured but still can float, tread, or scull enough to stay above water: \_\_\_\_\_.
  - c. This victim is moving but cannot call out for help or wave. He or she may submerge in as little as 20–60 seconds: \_\_\_\_\_.
  - d. This victim does not move and may be at the surface or submerged:  
\_\_\_\_\_.
  - e. This victim's condition may be the result of hyperventilation and underwater swimming: \_\_\_\_\_.
  - f. This victim exhibits the "instinctive drowning response": \_\_\_\_\_.
4. What conditions might cause a sudden passive victim?

### Effective Scanning/Lifeguard Stations/Areas of Responsibility

5. Effective scanning is a visual technique in which the lifeguard \_\_\_\_\_ observes swimmer behaviors and looks for \_\_\_\_\_ that someone in the water needs help.
6. What should your head be doing while scanning?
7. What are 3 guidelines for who, where, and how to scan?
  
8. Name at least two factors that can negatively affect scanning.

9. How can lifeguards prevent fatigue while scanning?
10. What are 3 stations for lifeguarding? What is the purpose/advantage of each?
  
11. What are 3 types of ground-level stations?
12. What is the purpose of lifeguard rotation?
13. What is the most important aspect of lifeguard rotation?
14. Rotation allows lifeguards to take a \_\_\_\_\_ at least once per hour.
15. Every lifeguard in a station has an \_\_\_\_\_.
16. A single lifeguard scanning the entire pool is providing \_\_\_\_\_ coverage.
17. Two or more lifeguards that supervise overlaps sections of the pool are providing \_\_\_\_\_ coverage.
18. One or more lifeguards that expand their surveillance to the entire pool while a lifeguard making a rescue are providing \_\_\_\_\_ coverage.
19. The RID factor explains why \_\_\_\_\_ occur at facilities supervised by lifeguards.
20. The RID factor stands for (1) the failure of the lifeguard to \_\_\_\_\_ the victim, (2) the \_\_\_\_\_ of secondary responsibilities (i.e., assigned by a supervisor) while the lifeguard is scanning, and (3) the \_\_\_\_\_ of the lifeguard from surveillance.

### **Special Considerations for Patron Surveillance**

21. Pick a specific area/attraction in an environment other than a pool and briefly describe the surveillance challenges and techniques.
  
22. What is the buddy system? Buddy checks? A buddy board? Color caps/wristbands?

## Chapter 4: Emergency Preparation

1. What is an emergency action plan (EAP)?
2. What are safety team responsibilities during an emergency that may be defined in an EAP?
3. How is the EAP activated?
4. How many steps are in the sample emergency action plan on pages 50-51? \_\_\_\_ Which steps are performed while rescuing and caring for the victim? \_\_\_\_\_ Which steps should be performed the same day as the emergency? \_\_\_\_\_
5. What are common responsibilities after an emergency?
6. What is critical incident stress?

## Chapter 5: Rescue Skills

1. A lifeguard must always be prepared to \_\_\_\_\_ the \_\_\_\_\_ to make \_\_\_\_\_.
2. After determining that the victim needs help, the lifeguard should assess the \_\_\_\_\_ and use the appropriate \_\_\_\_\_.

### General Procedures for a Water Emergency

3. Number the following steps in proper order for a water emergency (NOTE: the lifeguard has already recognized the emergency and activated the EAP):
  - \_\_\_\_ Move the victim to safety.
  - \_\_\_\_ Enter the water safely, if appropriate.
  - \_\_\_\_ Perform an appropriate rescue.
  - \_\_\_\_ Provide emergency care, if needed.
  - \_\_\_\_ Remove the victim from the water.
  - \_\_\_\_ Assess the victim's condition.
4. Name 3 factors that determine how you should enter the water.
5. Despite having a duty to act, the lifeguard must always provide for \_\_\_\_\_ as well as for the safety of the victim while making any rescue.

### Rescue Equipment

6. The use of rescue equipment makes a rescue safer for both the \_\_\_\_\_ and the \_\_\_\_\_.
7. The primary piece of rescue equipment for the lifeguard is the \_\_\_\_\_.
8. Read each of the following equipment descriptions and write the name of each:
  - A 20- to 30-inch buoyant ring with an attached line: \_\_\_\_\_.
  - A 10- to 15-foot made of aluminum or fiberglass: \_\_\_\_\_.
  - The same device with a blunt hook: \_\_\_\_\_.
  - A 45- to 54-inch, foam-filled device with an attached towline and shoulder strap: \_\_\_\_\_.
  - A plastic or fiberglass device used to paddle out to victims at a waterfront: \_\_\_\_\_.
  - A molded plastic buoyant device with a towline: \_\_\_\_\_.
9. Hold the \_\_\_\_\_ of the rescue tube to keep it from getting caught on something when starting a rescue.

### Entries

10. The 4 entries taught in Red Cross Lifeguarding courses?
11. The stride jump should only be used into water at least \_\_\_\_\_ feet deep from a height of no more than \_\_\_\_\_ feet above the water surface.
12. The \_\_\_\_\_ can be performed from a lifeguard tower into deep water or from the deck into shallow water. When using this entry from the tower into a wave pool, you must time the entry so you enter the water on the \_\_\_\_\_ of a wave.
13. The slowest entry is the \_\_\_\_\_. It is the \_\_\_\_\_ entry, especially when the water is \_\_\_\_\_, the location is \_\_\_\_\_, or a \_\_\_\_\_ is nearby in the water.
14. The \_\_\_\_\_ is used to enter the water from a gradual slope such as a beach or waterfront or a zero-depth pool. To perform this entry, \_\_\_\_\_ into the water with \_\_\_\_\_ high and then \_\_\_\_\_ into the water and start swimming. Do not \_\_\_\_\_ or \_\_\_\_\_ into the water.

### Rescue Approaches

15. The 2 approach strokes are the modified \_\_\_\_\_ and the \_\_\_\_\_.
16. For shorter distances, the rescue tube should be kept under the lifeguard's \_\_\_\_\_ or \_\_\_\_\_ while swimming head up. For longer distances, the rescue tube can \_\_\_\_\_ behind the lifeguard and be repositioned under the armpits before contacting the victim.
17. In shallow water, it may be faster to \_\_\_\_\_ to the victim while holding the rescue tube at the \_\_\_\_\_.

### Assists

18. The most common way lifeguards help patrons is by making \_\_\_\_\_.
19. How many assists are taught in Lifeguarding?
20. Which assist do you think you will do most often on the job?

### Rescues at or near the Surface

21. What are the 3 rescues at or near the surface?
22. What is the difference in the execution of the active and passive rear rescues?

### Rescuing the Submerged Victim

23. Name 2 possible causes for a submerged, nonspinal victim in shallow water.
24. What type of surface dive is performed for the deep-water submerged victim rescue (nonspinal)?
25. When you submerge, what do you do if the towline isn't long enough to reach the victim? What about if you let go of the towline and the rescue tube drifts away?

### Escapes

26. Under normal circumstances, what supports you if the victim grabs you during a rescue?
27. When performing the front or rear head-hold escape, what do you do just before submerging with the victim?

### Multiple-Victim Rescue

28. If you are the first lifeguard to reach multiple victims, what should you do?
29. If there are multiple victims at a waterfront, what should some lifeguards do while other lifeguard rescue victims at the surface?
30. If victims calm down, how can they help the lifeguard?

### Removal from the Water

31. Which removal from the water is used with nonspinal victims in deep-water?
32. Which removal can be used for the victim from shallow water or to move a victim on land (see p. 99)?
33. What are the other 2 shallow-water removals?

## Chapter 6: Before Providing Care and Victim Assessment

1. The lifeguard is a professional rescuer—a \_\_\_\_\_ in the EMS system.
2. To help prevent disease transmission, a lifeguard must understand how \_\_\_\_\_ are spread and what \_\_\_\_\_ can be taken.
3. The most common pathogens are \_\_\_\_\_ and \_\_\_\_\_.
4. Which of these can live outside the body and which need other organisms to live?

### Hepatitis B

5. What is the most effective means of preventing hepatitis B?
6. What must be made to lifeguards who have occupational exposure to blood?

### Hepatitis C

7. Why is hepatitis C more serious than hepatitis B?

### HIV

8. HIV causes \_\_\_\_\_.
9. The infections that strike when the body is weakened by HIV are called \_\_\_\_\_.

### How Pathogens Spread

10. For any disease to be spread, a \_\_\_\_\_ must be present, a \_\_\_\_\_ of the pathogen must be present, the person must be \_\_\_\_\_ to the pathogen, and the pathogen must pass through the correct \_\_\_\_\_.
11. How are bloodborne pathogens (i.e., hep B, hep C, and HIV) spread?

12. What are the 4 ways that diseases are spread?
13. The risk of disease transmission after a needlestick or cut exposure is about \_\_\_\_\_% for hep B, \_\_\_\_\_% for hep C, and \_\_\_\_\_% for HIV.
14. Individuals who receive the hepatitis B vaccine develop \_\_\_\_\_ to the disease and have virtually \_\_\_\_\_ risk of infection.

### Preventing the Spread of Bloodborne Pathogens

15. OSHA has issued regulations about on-the-job exposure to \_\_\_\_\_.
16. Do these regulations apply to lifeguards?
17. What is the written plan an employer must have that outlines protective measures to prevent exposure incidents on the job?
18. Universal precautions are practices designed to prevent or minimize exposure by treating \_\_\_\_\_ and certain other substances as potentially \_\_\_\_\_.
19. Standard precautions or body-substance isolation precautions treat \_\_\_\_\_ body fluids as potentially infectious.
20. What protective equipment is recommended while caring for a victim with spurting blood?
21. Name one guideline for using nonlatex gloves.
22. What practice is performed immediately before and after providing care?
23. The things used in the workplace to reduce exposure are called \_\_\_\_\_; the things done to reduce exposure risk are called \_\_\_\_\_.
24. The disinfecting solution for cleaning spills is \_\_\_\_\_ bleach per \_\_\_\_\_ water.
25. What should you do immediately if exposed to a victim's blood? What should you do after exposure?

### General Procedures for Assessing Injury or Sudden Illness on Land

26. The general procedure for assessing injury/illness on land has 4 steps: (1) \_\_\_\_\_ the \_\_\_\_\_, (2) perform an \_\_\_\_\_ assessment, (3) summon \_\_\_\_\_ personnel, and (4) perform a \_\_\_\_\_ assessment.
27. What 4 things do you determine during the scene size up?
28. What is the purpose of the initial assessment?
29. Name 2 conditions in which you would call 9-1-1 (try to select conditions you think no one else in class will pick).

30. Find a nonlife-threatening condition on the list of conditions that requires a 9-1-1 call?
31. Which step in assessment (see question 26) is only done with a conscious victim?
32. The initial assessment includes what 4 (or 5) checks?
  
33. What must you do EVERY TIME just before checking for breathing or giving breaths?
34. The recovery position is used to maintain an \_\_\_\_\_ for a \_\_\_\_\_ victim with a decreased \_\_\_\_\_ of \_\_\_\_\_.
35. What technique do you use to roll the victim into recovery position if you suspect a spinal injury?

### Emergency Moves

36. Do not move the victim unless it is \_\_\_\_\_.
37. What is 1 reason for moving a victim?
38. What is 1 way to protect yourself from injury while moving a victim?
39. Which emergency move is best for a possible spinal injury victim?
40. Which emergency move would be a last resort for a victim too big to move any other way?

## Chapter 7: Breathing Emergencies

1. A breathing emergency occurs if a victim has \_\_\_\_\_ or \_\_\_\_\_.
2. If you know someone who ever had breathing difficulty, what was the cause?
3. What are 2 signs of breathing difficulty that you would most easily recognize?
4. A victim who has stopped breathing is in respiratory \_\_\_\_\_.
5. When checking for breathing, you may detect an irregular, gasping, or shallow breath. This is called an \_\_\_\_\_ breath. This is not real breathing.
6. If a victim is not moving or breathing but has a pulse, begin \_\_\_\_\_.

### Rescue Breathing

7. To perform rescue breathing, give 1 breath every \_\_\_\_\_ seconds for an adult or 1 breath every \_\_\_\_\_ seconds for a child or infant.
8. Every rescue breath should last about \_\_\_\_\_ and make the chest clearly \_\_\_\_\_.
9. How long do you perform rescue breathing before checking for signs of life (i.e., pulse and breathing)? How long do you check?
10. A lifeguard should have which breathing barrier(s) on hand at all times?
11. How should you open the airway if you suspect a spinal injury?

12. If you perform rescue breaths too forcefully or too quick, air can enter the stomach, causing \_\_\_\_\_ . What complication can this cause?
13. A submerged victim may likely \_\_\_\_\_. If this happens, support the victim's \_\_\_\_\_ and \_\_\_\_\_ and turn the victim onto \_\_\_\_\_.
14. When giving rescue breaths, should dentures be left in place?

### Airway Obstruction

15. The most common cause of respiratory emergencies is \_\_\_\_\_.
16. What are the 2 types of airway obstructions?
17. What techniques are used in tandem to care for conscious obstructed airway?
18. What is the first thing to do if your breaths do not go in during the initial assessment?
19. What technique is used for unconscious obstructed airway?
20. When do you do a finger sweep? How do you do a finger sweep?

### Emergency Oxygen/Oxygen Administration

21. What breathing devices for rescue breathing can also be used to administer oxygen?
22. Which device delivers the highest oxygen concentration?

## Chapter 8: Cardiac Emergencies

1. The 4 links in the Cardiac Chain of Survival are: (1) early \_\_\_\_\_ and early \_\_\_\_\_ to \_\_\_\_\_, (2) early \_\_\_\_\_, (3) early \_\_\_\_\_, and (4) early \_\_\_\_\_ medical care.
2. What are common signs/symptoms of a heart attack?
3. How do women and men differ when experiencing a heart attack?
4. Name 2 important care steps for heart attacks.
5. \_\_\_\_\_ occurs when the heart stops beating or beats too irregularly or weakly to circulate blood effectively.
6. What are the signs of cardiac arrest?

### CPR

7. CPR is the combination of \_\_\_\_\_ and \_\_\_\_\_.
8. Effective CPR has 2 benefits; what are they?
9. Chest compressions are delivered at a rate of \_\_\_\_\_ per minute.
10. Chest compressions must be deep: \_\_\_\_\_ to \_\_\_\_\_ inches for adults; \_\_\_\_\_ to \_\_\_\_\_ inches for children; and \_\_\_\_\_ to \_\_\_\_\_ inch for infants.

11. Where do you position your hands to give chest compressions for an adult/child or an infant?
12. A cycle of 1-rescuer CPR (regardless of victim) is \_\_\_\_\_ compressions and \_\_\_\_\_ breaths.
13. A cycle of 2-rescuer CPR for adults is \_\_\_\_\_ compressions and \_\_\_\_\_ breaths. For children and infants, it is \_\_\_\_\_ compressions and \_\_\_\_\_ breaths.
14. What technique do you use for 2-rescuer infant CPR?

### AEDs

15. CPR keeps blood flowing to vital organs but often cannot correct the underlying \_\_\_\_\_ . An electric shock, called \_\_\_\_\_ is required to convert the heart's rhythm from irregular to normal sinus rhythm.
16. V-\_\_\_\_\_ is characterized by totally disorganized electrical activity.
17. V-\_\_\_\_\_ is characterized by very rapid contractions of the ventricles.
18. No electrical activity in the heart (flatline) is called \_\_\_\_\_.
19. Place a pad on the victim's upper \_\_\_\_\_ chest and another pad on the lower \_\_\_\_\_ side.
20. Do not touch the victim while the AED is \_\_\_\_\_ or \_\_\_\_\_.
21. If the victim is removed from the water, dry the victim's \_\_\_\_\_ and move away from \_\_\_\_\_.
22. What follows AED analysis (whether or not a shock is delivered)?

## Chapter 9: First Aid

### Secondary Assessment

1. During the secondary assessment, perform a \_\_\_\_\_-to-\_\_\_\_\_ exam for adults (or a \_\_\_\_\_-to-\_\_\_\_\_ for children) and a brief \_\_\_\_\_ history.
2. The M in SAMPLE stands for:
3. What should you do if a life-threatening condition develops while performing the secondary assessment?

### Sudden Illness

4. You do not have to know what the \_\_\_\_\_ is to provide \_\_\_\_\_.
5. What should you look for if a victim begins to be ill?
6. What are 2 signs/symptoms of sudden illness?
7. What should you give a conscious diabetic victim?
8. Name 2 types of seizure that requires a 9-1-1 call.

9. What should you do if a seizure occurs in the water?
10. How can you check a victim for a stroke?

### Bites and Stings

11. What are the 2 poisonous spiders mentioned in the text?
12. Of the 7000 people bitten by snakes in the US, less than \_\_\_\_\_ die.
13. What 2 things should you do for all snakes bites? What 3<sup>rd</sup> step should be taken for an elapid snake bite (like a coral snake)?
14. Besides spiders and snakes, what other bites and stings can cause problems?
15. What is the chief concern when someone is stung by a bee or marine animal?

### Poisoning

16. A poison is any substance that can cause injury, illness, or death when \_\_\_\_\_ to the \_\_\_\_\_.
17. What is the number of the Poison Control Center?
18. Poisons can be \_\_\_\_\_ (a liquid or solid taken orally), \_\_\_\_\_ (a gas), \_\_\_\_\_ (like from poison ivy), or \_\_\_\_\_ (like a bee sting).

### Wounds

19. A wound is a physical injury to the \_\_\_\_\_ of the body.
20. A small closed wound results in a \_\_\_\_\_. A larger closed wound results in \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_, or hard areas of the body.
21. What are the 4 types of open wounds?
22. What is the principle care for severe bleeding?
23. What is the first sign listed for shock?
24. The care steps for shock include: (1) calling \_\_\_\_\_, (2) monitoring \_\_\_\_\_, (3) controlling any severe \_\_\_\_\_, (4) keep the victim from getting \_\_\_\_\_ or \_\_\_\_\_, (5) raise the victim's \_\_\_\_\_ 8 to 12 inches if you can do so without causing injury, (6) \_\_\_\_\_ and \_\_\_\_\_ the victim, and administer \_\_\_\_\_.
25. Which way should the victim lean while applying direct pressure for a nosebleed?
26. What should you do with a dislodged tooth? A severed body part?
27. What about an embedded object?
28. What are the 4 sources for burns?
29. What are the 3 degrees of burns?

30. What are the care steps for burns?
31. Name 2 burns that require immediate medical attention (critical burns).

### Injuries to Muscle, Bone and Joint

32. What are the 4 types of muscle/bone/joint injuries?
33. Splinting should be used ONLY if what is necessary?
34. What are the 4 ways to immobilize muscle/bone/joint injuries?
35. What is an open fracture?

### Heat- and Cold-Related Emergencies

36. Heat-related emergencies are \_\_\_\_\_ conditions caused by \_\_\_\_\_ to heat.
37. What are the 3 types of heat-related emergencies?
38. What are the 2 types of cold-related emergencies?
39. How should you care for temperature-related emergencies?
40. How do you care for frostbite?

## Chapter 10: Caring for Spinal Injuries

1. Every year, there are approximately \_\_\_\_\_ spinal cord injuries in the United States. Approximately \_\_\_\_\_% of these injuries occur during sports and recreation, \_\_\_\_\_ from diving into \_\_\_\_\_ water.
2. Head, neck, and back injuries \_\_\_\_\_ occur during supervised diving into deep water.
3. In pools, these injuries most often occur at the \_\_\_\_\_ end, in a \_\_\_\_\_, or where the bottom \_\_\_\_\_ . They also occur when a diver \_\_\_\_\_ a floating object or a person, or when an individual slips and falls on the \_\_\_\_\_ or in the \_\_\_\_\_.
4. In open water, these injuries occur in areas where the \_\_\_\_\_ changes due to tide or currents. Also, they occur due to collisions with underwater \_\_\_\_\_.

### Causes of Head, Neck, and Back Injuries

5. Situations that should lead you to suspect a spinal injury include:
  - Any injury caused by entry into \_\_\_\_\_ water.
  - An injury caused by a fall from greater than \_\_\_\_\_.
  - An injury involving a \_\_\_\_\_, a water slide, or an entry from a \_\_\_\_\_.
  - Any sign or symptom of injury to the \_\_\_\_\_, neck, or \_\_\_\_\_.
6. Signs and symptoms of spinal injuries include:
  - Bruising of the \_\_\_\_\_, especially around the \_\_\_\_\_ or behind the \_\_\_\_\_.
  - Unusual \_\_\_\_\_, bruises, or \_\_\_\_\_ on the head, neck, or back.
  - Blood or other fluids in the \_\_\_\_\_ or \_\_\_\_\_.
  - Heavy external \_\_\_\_\_ of the head, neck, or back.
  - Signs of serious injury (e.g., loss of consciousness, loss of balance, impaired breathing, persistent headache, loss of feeling or movement, etc.) as the result of, or immediately following, any of the situations in step \_\_\_\_ above.

### Caring for Head, Neck, and Back Injuries

7. To care for a spinal victim, the lifeguard must \_\_\_\_\_ and restrict \_\_\_\_\_ to the head, neck, and back.
8. The care provided to the victim depends on the victim's \_\_\_\_\_ and \_\_\_\_\_, the availability of \_\_\_\_\_, the air and water \_\_\_\_\_, and your facility's specific \_\_\_\_\_.

### Caring for Head, Neck, and Back Injuries in the Water

9. How many steps are there in the general rescue procedure for spinal injuries?
10. Looking back at pages 50-51, under which Emergency Action Plan step do these general water rescue steps go?
11. What should you do if the victim of a suspected spinal injury shows no signs of life?
12. The spine consists of small bones called \_\_\_\_\_ separated by cushions of cartilage called \_\_\_\_\_. Openings in the center of the vertebrae allow the bundle of nerves called the \_\_\_\_\_ to pass in a protected column from the brain to the lower back. This column is divided into \_\_\_\_\_ regions.

### Manual In-Line Stabilization Techniques

13. How many techniques are used to minimize movement of the victim's head, neck, and back?

14. The \_\_\_\_\_ uses the victim's arms to stabilize the head.
15. In the \_\_\_\_\_, the rescuer holds the victim's \_\_\_\_\_ and the back of the victim's \_\_\_\_\_ and uses the forearms to stabilize the head, neck, and back.
16. Both techniques can be used in \_\_\_\_\_ or \_\_\_\_\_ water with a \_\_\_\_\_ or \_\_\_\_\_ victim at, near, or below the surface.

### **Using a Backboard in Shallow Water**

17. At least \_\_\_\_\_ rescuers are needed to secure a victim to a backboard. If available, other \_\_\_\_\_ or \_\_\_\_\_ can help.
18. The purpose of the backboard is to restrict motion of the \_\_\_\_\_, \_\_\_\_\_, and \_\_\_\_\_ while removing the victim from the water.
19. When backboarding the victim, what is the difference between using the head splint and head and chin support (as explained in step 2 on page 166)?
20. The victim's body should be secured with a minimum of \_\_\_\_\_ straps. In what order should the victim's body be strapped?
21. What is the purpose of the strap under the victim's armpits?
22. How is the head immobilized on the backboard? EXTRA CREDIT: Why is the head secured last?

### **Caring for Head, Neck, and Back Injuries—An Unconscious Victim**

23. Why should you quickly remove a suspected spinal injury victim from the water when there are no signs of life?
24. While you should not waste time \_\_\_\_\_ a nonbreathing victim to a backboard, you should make every effort to minimize \_\_\_\_\_ of the victim's head and neck.

### **Caring for Head, Neck, and Back Injuries in Deep Water**

25. Fortunately, head, neck, and back injuries \_\_\_\_\_ occur in deep water.
26. If possible, a spinal victim in deep water should be \_\_\_\_\_ to \_\_\_\_\_.
27. If the victim cannot be moved to shallow water, you should use the \_\_\_\_\_ for support.
28. The same procedures, slightly \_\_\_\_\_ for deep water, can be used to support and rescue a spinal victim in deep water.

### ***Caring for Head, Neck, and Back Injuries—Special Situations***

29. Which technique should be used to turn and support a victim in extremely shallow water?
30. In water with waves, how can rough water and waves be “blocked”?
31. In water with a current, after supporting the victim and turning him or her face-up, slowly turn the victim so that the current pulls her or her \_\_\_\_\_ downstream. Do not let the current press \_\_\_\_\_ on the victim or the force the victim into a \_\_\_\_\_ or other obstruction. Keep the victim’s \_\_\_\_\_ pointed upstream into the current.
32. In a catch pool with one slide, the calmest water is located \_\_\_\_\_ of the catch pool. With two slides, the calmest water at the \_\_\_\_\_ of the catch pool between the \_\_\_\_\_.
33. Backboarding in a speed slide requires \_\_\_\_\_ lifeguards to hold the victim’s head and \_\_\_\_\_ the victim so the backboard can be positioned.

### **Head, Neck, and Back Injuries on Land**

#### ***Caring for Head, Neck, and Back Injuries on land***

34. Since the goal with a suspected spinal injury victim is to minimize movement of the head, neck, or back, how should you instruct the victim to answer your questions?
35. To stabilize the head of a suspected spinal injury victim, place \_\_\_\_\_ on both sides of the victim’s \_\_\_\_\_ and hold it in-line with the victim’s body.
36. If a victim becomes unstable while standing or sitting with head held in-line, you should slowly \_\_\_\_\_ the victim to the ground with the assistance of other \_\_\_\_\_. Using a backboard to do this requires a minimum of \_\_\_\_\_ lifeguards.
37. What is a concussion?
38. A victim with a concussion may lose \_\_\_\_\_ for a moment or may say that he/she “\_\_\_\_\_” or “\_\_\_\_\_.” A victim may also be \_\_\_\_\_ or have \_\_\_\_\_.
39. Anyone suspected of having a head injury in or out of the water should be \_\_\_\_\_ by a \_\_\_\_\_ immediately.

### **Chapter 11. The Benefits of Lifeguarding**

40. Being a professional lifeguard requires \_\_\_\_\_ and a lot of \_\_\_\_\_, but the personal and professional benefits are well worth the effort.
41. After reading the Personal Benefits section, in your opinion:
  - Which personal benefit is the most important of them all?
  - Which personal benefit would you like to develop the most?
  - Which personal benefit might be most important to the public you serve?

- Which might be most important to your coworkers?
42. Which U.S. President began his professional career as a lifeguard?