



World Academy of  
Safety & Health

**GUARD**

**STUDENT MANUAL  
V.2021**

**GUARD**

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# Lifeguard – Student Manual, v.2021

## Purpose:

This *World Academy of Safety & Health (WASH) Student Manual, v.2021* is exclusively intended to provide guidance and information to enrolled students in the World Academy of Safety & Health (WASH) Lifeguard certification training course(s). All information contained within this manual is subject to change at any time for any reason and without notice. All updates, changes, alterations, and new editions will be published on [www.lifeguardcertifications.com](http://www.lifeguardcertifications.com).

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# Disclaimer

*World Academy of Safety & Health (WASH)* has made all reasonable efforts to ensure the content of this *Student Manual, v.2021* is accurate, up-to-date, and aligned with the most recent industry standards and recommendations at the time of its publication. Scientific and medical information and data can frequently change. Medical recommendations may, in turn, be updated to reflect this latest science and data. In addition to the regular 5-year program and curriculum review and update cycle, the *World Academy of Safety & Health (WASH) Student Manual, v.2021* will be updated as frequently as is needed based upon any changes in medical recommendations. Any and all updates will be published on: [www.lifeguardcertifications.com](http://www.lifeguardcertifications.com).

Each emergency situation is unique and, hence, warrants its own set of guidelines, principles, recommendations, information and/or emergency response protocols. Therefore, it is not possible for *World Academy of Safety & Health (WASH)* to provide blanket emergency response recommendations.

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World Academy of Safety & Health (WASH) utilizes an Advisory and Review Committee in the development of all programs, courses, manuals, resources, and other instructional materials.

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# About Us

World Academy of Safety & Health is an international certifying body for Pool Lifeguards, Waterfront Lifeguards, Surf Rescue Lifeguards, Lifeguard Instructors, and Lifeguard Supervisors.

We offer high-quality courses that are an affordable, flexible, and accessible option. Courses are delivered as full in-person classes in select areas across the world. We urge you to utilize our website for the most up to date list of approvals: <http://lifeguardcertifications.com/2022/01/11/program-curriculum-approvals/>

We offer a need-based scholarship program for people to participate in lifeguard certification courses. We rely on outside support in the form of donations, grants, and volunteers.

We invite you to join us in our mission to prevent death by drowning worldwide.

Certification courses available in select areas worldwide. We look forward to serving you!

**The World Academy of Safety & Health (WASH) Lifeguard Certification Course was developed to comply with the standards outlined in section 6 of the Model Aquatic Health Code (MAHC)**

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<b>Purpose of Certification and Training Course .....</b>	<b>8</b>
<b>Certification Policies &amp; Procedures .....</b>	<b>9</b>
Provider-Level Course Prerequisites.....	9
Requirements for Successful Completion of Provider-Level Course .....	9
Certification Period for Provider-Level Course .....	9
Certification Renewal Requirements for Prover-Level Course .....	10
<b>Course Design .....</b>	<b>11</b>
Course Overview:.....	11
Program & Curriculum Structure:.....	11
Pre-Requisite(s):.....	11
Delivery Methods:.....	11
<b>Evaluation of Participants .....</b>	<b>12</b>
Formal Evaluation of Required Physical Skills:.....	12
Formal Evaluation of Content Knowledge:.....	12
Certification:.....	12
<b>Course Pre-Requisites .....</b>	<b>13</b>
<b>Introduction to Lifeguarding - Chapter 1 .....</b>	<b>14</b>
The Professional Lifeguard:.....	14
Reliance on Training:.....	15
The Three R's.....	16
Preventative Lifeguarding.....	17
Legal Information for Lifeguards .....	18
<b>Good Samaritan Laws.....</b>	<b>18</b>
<b>Personal Protective Equipment - Chapter 2 .....</b>	<b>20</b>
Glove Removal.....	20
Exposure to Bloodborne Pathogens.....	20
Disposal and Cleaning of Contaminated Materials.....	21
Fecal Matter Cleanups .....	21
<b>Risk Management &amp; Safety - Chapter 3 .....</b>	<b>22</b>
Inclement Weather Conditions.....	22
<b>Enforcing Rules - Chapter 4 .....</b>	<b>25</b>
Example of Pool Rules .....	26
Voluntary Hyperventilation & Breath-Holding.....	27
<b>Drowning Process - Chapter 5 .....</b>	<b>28</b>
Drowning Statistics .....	28
What is Drowning.....	28
Common Causes of Drowning.....	28
<b>Patron Surveillance - Chapter 6 .....</b>	<b>30</b>
Surveillance .....	30
Zone of Coverage.....	30
<b>Full Coverage.....</b>	<b>30</b>
<b>Overlapped Coverage.....</b>	<b>30</b>
<b>Back-Up Coverage.....</b>	<b>30</b>
<b>Scanning - Chapter 7 .....</b>	<b>31</b>
Proper Scanning.....	31
Rotations.....	32
<b>Steps of an Effective &amp; Safe Rotation.....</b>	<b>32</b>
<b>Victim Recognition - Chapter 8 .....</b>	<b>33</b>
Victim Recognition.....	33
<b>Emergency Action Plan (EAP) - Chapter 9 .....</b>	<b>35</b>
Communication.....	35
Aquatics Facility Sample Emergency Action Plan (EAP).....	37
Aquatics Facility Sample Emergency Action Plan (EAP) – One Lifeguard Facility.....	38

<b>Water Emergencies - Chapter 10</b> .....	<b>40</b>
Assists.....	40
Tossing Assist.....	40
Reaching Assist.....	41
Water Entries.....	42
Cannon Ball Jump Entry.....	42
Scissors Jump Entry.....	42
Slide-In.....	43
Walk-In or Run-In.....	43
Approaching the Victim.....	43
Water Rescues.....	44
Rescue Tube.....	44
Contact and Control.....	44
Rescue Procedure and Coverage.....	45
Multiple Victim.....	51
Submerged Victim Rescue.....	51
Feet-First and Head-First Surface Dives.....	51
In-Water Ventilations.....	54
Escapes.....	55
Extraction From the Water.....	57
<b>Spinal Trauma - Chapter 11</b> .....	<b>59</b>
Recognizing Signs & Symptoms.....	59
Stabilization of Spinal Trauma.....	59
Manual Inline Stabilization.....	61
Head-Chin-Chest Grip.....	61
Arm Splints.....	64
Backboarding Spinal Trauma Victims.....	65
Seated Stable Carry.....	65
Standing Backboarding.....	66
Zero Depth Backboarding.....	67
Diving Depths.....	67
In-Water Backboarding.....	68
<b>In-Service Training - Chapter 14</b> .....	<b>75</b>
In-Service Training.....	75
<b>Special Scenarios - Chapter 15</b> .....	<b>76</b>
<b>Appendix A</b> .....	<b>78</b>
<b>References</b> .....	<b>80</b>

# *Purpose of Certification and Training Course*

The purpose of the World Academy of Safety & Health (WASH) Pool Lifeguard Curriculum and Certification program is to provide the participant(s) with the confidence, content knowledge, and physical skills to recognize, respond, and recover in the event of an emergency in or around a swimming pool.

This program offers the flexibility to be able to adapt the physical skills and/or the type of emergency response and care to the specific and/or special circumstances at a swimming pool aquatic facility.

This pool lifeguard course is *not* designed to:

- train lifeguards to supervise other lifeguards;
- train lifeguards to work at a waterfront facility; train lifeguards to work at a waterpark facility;
- train lifeguards to work at a tidal surf beach or other open water environment.

In order to:

- provide lifeguard supervision, successful completion of a management or supervisory course is necessary;
- earn certification and the ability to work at a waterfront facility, successful completion of the WASH Waterfront Lifeguard add-on course is necessary once the WASH pool lifeguard course is successfully completed;
- earn certification and the ability to work at a waterpark facility, successful completion of the WASH Waterpark Lifeguard add-on course is necessary once the WASH pool lifeguard course is successfully completed;
- earn certification and the ability to work at a tidal surf beach or other open water facility and/or environment, successful completion of the WASH Surf Rescue add-on course is necessary once the WASH pool lifeguard course is successfully completed.

The validity and ability to be employed as a lifeguard acting under any of the WASH add-on certificates is contingent upon any and all local, state, health department, and/or any other government or municipal guidelines regulating the recognition of these WASH certificates.

All course participants have electronic access (using the student login on [lifeguardcertifications.com](http://lifeguardcertifications.com)) to the course manuals, course slide presentations, and course skills video clips beginning with class registration and until the expiration date on the WASH certificate for the specific course in which the participant is enrolled.

# *Certification Policies & Procedures*

## **Provider-Level Course Prerequisites**

Prior to the start of the course participants:

- Must be, at minimum, fifteen (15) years of age by the final meeting date of the course to be eligible to enroll.
- Must successfully demonstrate the course's pre-requisite physical skills:
  - Swim 300 yards using only front crawl or breaststroke without resting. This is an untimed event.
  - Tread water using only one's legs for two (2) minutes.
  - Swim twenty-five (25) yards, dive to a depth between nine (9) feet and twelve (12) feet to retrieve a ten (10) pound weight, return to the surface, swim twenty-five (25) yards back to the starting point while keeping the ten (10) pound weight above the water's surface. The participant must exit the pool without use of stairs or steps with the 10-pound weight in hand. Each participant will have a maximum of 1 minute and 40 seconds to complete this prerequisite skill.

## **Requirements for Successful Completion of Provider-Level Course**

In order to earn a World Academy of Safety & Health (WASH) Pool Lifeguard certificate, participants:

- Must be present for all class meetings. This includes but may not be limited to classroom sessions, pool sessions, and other in-person sessions.
- Must meet the course objective for each lesson by successfully demonstrating each required physical skill.
- Must earn a minimum score of eighty (80) percent on the final proctored written exam.

## **Certification Period for Provider-Level Course**

Each World Academy of Safety & Health (WASH) Lifeguard certificate will have a validity period of one (1) year from the date of completion. This date as well as the certificate expiration date will be shown on the certificate itself.

Each American Safety & Health Institute (ASHI), an HSI company, certificate earned during a World Academy of Safety & Health (WASH) course will have a validity period of one (1) year from the date of completion. The Basic First Aid certificate will have a validity period of two (2) years from the date of completion. These dates as well as the certificate expiration date will be shown on the certificate itself.

World Academy of Safety & Health (WASH) reserves the right to suspend, revoke, or otherwise temporarily and/or permanently terminate the validity of any WASH certificate at any time and for any reason. This is at the sole discretion of World Academy of Safety & Health (WASH).

## Certification Renewal Requirements for Prover-Level Course

There are three (3) options available to World Academy of Safety & Health (WASH) certified lifeguards once their certificate expires.

- If the certificate is no more than 30 days expired, the person may choose to enroll and complete an abbreviated recertification World Academy of Safety & Health (WASH) lifeguard certification course to earn back their lifeguard certificate. This lifeguard recertification course requires successful completion of the following components for a participant to earn back their lifeguard certificate: pre-requisite physical skills as outlined in Lifeguard Participant Manual, Policies & Procedures, Section I Course Prerequisites; all required physical skills included in the course curriculum; and final exam.
- If the certificate is no more than 30 days expired, the person may choose to CHALLENGE the course. By successfully demonstrating the physical skills and passing the final written exam, the participant can renew his/her World Academy of Safety & Health (WASH) lifeguard certification.
- If the certificate is 31 days or more expired, the person must enroll and successfully complete a full World Academy of Safety & Health (WASH) lifeguard certification course to earn back their lifeguard certificate.

# Course Design

## Course Overview:

The WASH Lifeguard training course is intended for individuals who will seek employment as a pool lifeguard at a facility without special waterpark features such as lazy rivers, waterslides, diving boards, and any other water features. There are several course prerequisites that can be found in Section I of Policies & Procedures.

The goal of this course is to develop and equip students with the knowledge, skills, and confidence to respond during an in-water or dryland emergency while working as a pool lifeguard. WASH encourages instructional design and skill application that provides flexibility in terms of the best approach and response to an emergency based upon each individual facility's circumstances and constraints. WASH believes this approach allows for more real-world scenarios to be addressed and the most appropriate emergency response taught and practiced.

## Program & Curriculum Structure:

Pool Lifeguard training is a World Academy of Safety & Health (WASH) core course.

## Pre-Requisite(s):

Any person wishing to earn the WASH pool lifeguard certificate must successfully complete this core course (with exceptions being given to Lifeguard Instructors currently holding a valid certificate from another certifying agency recognized by WASH). Once the pool lifeguard training is successfully completed, participants will have the option to add additional *Units of Study* to earn additional specialty certificates that can include:

- Waterfront Lifeguard (lakefront/non-tidal)
- Waterpark Lifeguard
- Lifeguard Supervisor
- Surf Rescue Lifeguard (open tidal water)

## Delivery Methods:

In-Person, instructor-led training classes and blended format classes will be offered. Content will be provided via instructor lecture, instructor-facilitated discussion, small group work, video segments and slide presentations. The recommended student to instructor ratio is 10:1.

# *Evaluation of Participants*

## **Formal Evaluation of Required Physical Skills:**

Each participant will be evaluated on a pass-fail basis for all required physical skills. Each participant must successfully demonstrate each required physical skill.

## **Formal Evaluation of Content Knowledge:**

The written final exam is a required element to earn certification. This exam must be proctored by an Authorized World Academy of Safety & Health (WASH) instructor and is untimed – instructor(s) must provide each participant adequate time to complete the exam.

A participant must score an eighty (80) percent or better on the final written exam. If a participant is unable to meet this minimum score, he or she cannot be issued a certificate and must retake the course.

## **Certification:**

When a World Academy of Safety & Health (WASH) certificate is issued it signifies that the participant, on the date of completion as listed on the certificate, met all course objectives by successfully demonstrating for the WASH Instructor listed on the certificate:

- an understanding of content knowledge as based upon his or her score on the final written exam
- each required physical skill as listed on the Skills Assessment Form (SAF)

A valid WASH certification card does not guarantee the cardholder's current or future performance. It is the employer's responsibility to verify the cardholder's ability to successfully perform all job duties and responsibilities.

# Course Pre-Requisites

Prior to the first class session (or during the first class session) of any World Academy of Safety & Health (WASH) lifeguard certification course, each participant must successfully complete the course prerequisite physical skills.

If a participant fails to successfully complete any one of the pre-requisite physical skills, he/she will not be permitted to continue in the course.

- Verify all participants will be, at minimum, fifteen (15) years of age by the final class meeting.
- Continuously swim, using only the front crawl, for 300 yards (see Figure Pre.I.1).
- Tread water, using only one's legs, for two (2) minutes (see Figure Pre.I.2).
- Swim front crawl for twenty-five (25) yards; dive to a depth of between nine (9) and twelve (12) feet to retrieve a ten (10) pound weight; return to the surface with the weight; swim twenty-five (25) yards back to the starting point while keeping the ten (10) pound weight above the water's surface; exit the pool with the ten (10) pound weight without using the stairs and/or steps. This skill must be completed within one (1) minute and forty (40) seconds (see Figure Pre.I.3).



Figure Pre.I.1



Figure Pre.I.2



Figure Pre.I.3

# *Introduction to Lifeguarding – Chapter I*

**OBJECTIVE(S):** 1. Outline purpose of the course; 2. Identify the primary responsibility of a lifeguard; 3. Identify hazards to a lifeguard; 4. Explain how a lifeguard can remain alert while on duty; 5. Identify characteristics & behaviors of a professional lifeguard; 6. Review best practices for on-duty lifeguards; 7. Define preventative lifeguarding; 8. Explain the characteristics & best practices of preventative lifeguarding; 9. Identify the legal issues for which lifeguards need to have an awareness & understanding; 10. Explain lifeguard responsibilities as they relate to legal issues

The primary responsibility of all lifeguards is the safety and well-being of patrons. Often times, other facility related duties interfere with the job of a lifeguard.

If lifeguards are the staff members who are responsible for maintenance, cleanliness, membership status checks, and other duties then those duties must be assigned to lifeguards who are not in the stand and are not responsible, at that time, for patron surveillance.

Drowning can occur quickly in even the shallowest of water. It is crucial that the lifeguard remain vigilant and alert during his or her entire shift while in the stand and responsible for patron surveillance.

In order to remain alert, the lifeguard must take care of him or herself. The heat, humidity, and sun can take a toll on one's body. Lifeguards should remain hydrated; reapply sunscreen every few hours; use the umbrella if possible; and be rotated out of the sun every 30-40 minutes to perform other facility-related duties or to, simply, take a break.

Lifeguards are the last line of defense in drowning prevention. This responsibility must be taken seriously by all who are employed in the aquatics industry.

Finally, it is easy to become complacent while sitting in the lifeguard tower. This is particularly true if and when a significant number of days has passed since one's facility has experienced any type of emergency.

It is vital that all lifeguards continue to 'stand up in the canoe'. In other words, it is easy to sit down in a canoe and enjoy the ride. It takes tremendous focus and hard work to stand up in a moving canoe. The lifeguard must exercise this same type of focus and work hard to pay close attention to what is going on around him or her and be prepared to respond to any emergency – as all emergencies are unexpected.

## **The Professional Lifeguard:**

**Confident** – One must rely on his or her training. Be confident during an emergency and use one's training to properly and effectively recognize and respond to an aquatic emergency.

**Highly Skilled** – Practice one's physical skills on a regular basis to ensure they are sharp and one is prepared to respond during an aquatic emergency.

**Knowledgeable** – It is crucial to have and use one's knowledge to prevent, recognize and/or respond to an emergency. It is the lifeguard's responsibility to reinforce and maintain his or her level of knowledge by regularly reviewing content, participating in regular in-service training, and engaging in pre-season refreshers at your facility.

**Dependable** – Understand one's job responsibilities, take them seriously, and be willing to work as part of a team. Be punctual and use one's training to effectively respond to all emergencies.

**Polite and Firm** – Treat patrons with respect and be polite when enforcing rules and regulations to prevent accidents. Being polite should not be mistook for not being firm with the rules and regulations.

## Reliance on Training:

When faced with an emergency situation, it is not uncommon for fear, stress, and anxiety to take over and cause physiological reactions in one's body. These reactions may include increased heart rate, forgetfulness, and general mental and emotional panic all of which result in increased amounts of oxygenated blood to rush through the body. When the body reacts in this manner, the resulting impact on performance is negative as one's ability to utilize fine motor skills is diminished.

It is important for lifeguards to engage in ongoing training that simulates the intensity of an emergency situation. Practice drills that force lifeguards to exert energy to dramatically increase his or her heart rate coupled with practice that requires the lifeguard(s) to react and perform skills quickly will condition the mind and the body to be prepared to respond in a real emergency. The key is to prepare the lifeguards to respond without having to battle negative effects of the adrenaline rush.

Lifeguards often face high-stress situations that can lead to stress-related trauma. The nature of their job exposes them to various stressors, including witnessing near-drownings, performing rescues, and dealing with difficult or aggressive patrons. Here's a breakdown of potential stress-related trauma and some effective stress management techniques.

## Potential Stress-Related Trauma:

1. **Acute Stress Reaction:** Lifeguards may experience intense stress during a rescue or emergency, leading to symptoms like anxiety, panic, or confusion.
2. **Post-Traumatic Stress Disorder (PTSD):** Repeated exposure to traumatic incidents can result in PTSD, characterized by flashbacks, nightmares, and severe anxiety.
3. **Burnout:** Continuous exposure to stress without adequate recovery can lead to emotional and physical exhaustion, reduced performance, and disengagement from work.
4. **Compassion Fatigue:** Lifeguards may develop a diminished ability to empathize with others due to the emotional toll of repeatedly witnessing trauma and distress.
5. **Depression and Anxiety:** Ongoing stress can contribute to feelings of hopelessness, sadness, or persistent worry, affecting overall mental health.

## Stress Management Techniques

1. **Training and Preparedness:**
  - **Regular Drills:** Engage in routine emergency drills to build confidence and familiarity with rescue techniques.
  - **Scenario Training:** Practice handling various emergency situations to reduce anxiety and improve response.
2. **Peer Support:**
  - **Team Debriefings:** After a stressful incident, hold debriefing sessions to discuss experiences and feelings, fostering a supportive environment.
  - **Buddy Systems:** Partner with colleagues to provide mutual support and encouragement.
3. **Self-Care Practices:**
  - **Physical Exercise:** Engage in regular physical activity to relieve stress and improve mood.
  - **Adequate Rest:** Ensure sufficient sleep to promote recovery and mental clarity.
4. **Mindfulness and Relaxation Techniques:**
  - **Breathing Exercises:** Practice deep breathing or controlled breathing techniques to manage acute stress.
  - **Meditation and Mindfulness:** Incorporate mindfulness practices to improve focus and reduce anxiety.
5. **Professional Help:**
  - **Counseling Services:** Seek support from mental health professionals who specialize in trauma or stress management.
  - **Employee Assistance Programs:** Utilize available resources offered by employers for mental health support.
6. **Setting Boundaries:**
  - **Work-Life Balance:** Maintain a healthy separation between work and personal life to prevent burnout.
  - **Time Off:** Take regular breaks and time off to recharge physically and mentally.
7. **Positive Coping Strategies:**
  - **Journaling:** Write about experiences and feelings to process emotions and reflect on stressful incidents.
  - **Hobbies and Interests:** Engage in activities outside of work that bring joy and relaxation.

## The Three R's

- Recognize
- Respond
- Recover

These three phases can summarize all actions a lifeguard must perform to effectively and efficiently handle an emergency. All of the actions a lifeguard should be taking during an emergency fall under the broad umbrella of the three R's.

The **Recognize Phase** consists of 5 stages:

1. Determine the most effective positioning of the lifeguard stations to ensure proper patron surveillance can be maintained.
2. Use the proper positioning of lifeguard stations to determine the number of stations and, in turn, the number of lifeguards necessary.
3. Establish zones of coverage.
4. Maintain effective and constant scanning and patron surveillance.
5. Know, understand, and be able to properly identify the signs and symptoms of a distressed swimmer.

This is the most important phase of a lifeguard's job. In the absence of victim recognition, the victim will likely drown as there will be no emergency response and intervention.

The **Respond Phase** consists of 5 stages:

1. Immediately activate the Emergency Action Plan (EAP).
2. Decide on action/response required (i.e. assist or water entry for a rescue).
3. Execute the assist or water rescue.
4. Extract the victim from the water.
5. Complete a rescue or incident report and release victim.

The specific lifeguard response is dictated by a number of variables that include the type, location, severity of the emergency situation.

The **Recover Phase** is the final phase and consist of 5 stages:

1. Activate the Emergency Recovery Procedures.
2. Clean and disinfect contaminated equipment.
3. Replace equipment that may have been transported to hospital with the victim or otherwise had to be removed from service.
4. Ensure the facility is fully staffed.
5. Conduct and participate in Post-Incident Continuous Improvement Meeting.



Figure CI.2



Figure CI.3



Figure CI.4

## Preventative Lifeguarding

Each lifeguard organization must decide between preventative lifeguarding and reactive lifeguarding.

Preventative lifeguarding is a strategy that includes a series of techniques used to stop accidents, rescues, and other emergency incidents from occurring. It requires the lifeguard(s) to engage in continuous swimmer surveillance during the entirety of his/her shift and stop behaviors that could lead to an emergency incident.

Reactive lifeguarding is more similar to most other first responders and emergency services departments in that the lifeguards do not keep a constant, watchful eye on the beach or the swimmers. Instead, the lifeguard(s) are not assigned to a specific swimming area or beach but, rather, are on roving patrols across the entire shoreline. In this case, the lifeguards respond to an emergency call for help as opposed to working to prevent it.

Lifeguards are considered first responders. However, unlike any other first responder, typically a pool lifeguard's job is to prevent an emergency and/or accident from occurring as opposed to reacting and responding to an emergency or accident that has already occurred. Do not misunderstand, when an accident or emergency does occur, the lifeguard must respond and provide appropriate care under the certifications the lifeguard currently holds.

However, firefighters, for example, do not keep watch during their entire shift to prevent emergencies from occurring. Instead, they are called only when an emergency does occur. Lifeguards, on the other hand, keep constant watch with their primary responsibility being the prevention of an emergency.

Often times, people see the response of the fire departments, EMS, and police departments. However, the work of a lifeguard often goes unnoticed.

Preventative lifeguarding can include:

- **Internal Department and/or Organizational Policies and Protocols:** Some examples of these policies and protocols are: pool rules, patron surveillance techniques, established and well-planned employee training and expectations, and positioning of lifeguards based upon the layout of the facility.
- **Communication:** 1) Effective communication with/educating patrons - during this communication, the lifeguard(s) might share and explain the facility's rules and educate patrons about safe versus unsafe or risky behaviors. 2) Effective communication with fellow lifeguards and staff with regard to potential hazards, observations, and incidents/emergencies that may arise.
- **Rules and Regulations:** Consistently and effectively enforcing the facility's rules and regulations.
- **Surveillance and Monitoring** (also see Chapters #6 and #7): 1) Lifeguards must continuously scan the swimming area/water (and deck areas) to detect potential hazards, monitor swimmer/patron behavior, and identify swimmers/patrons in distress. 2) Swimming areas should be divided into designated zones with lifeguard(s) assigned to specific areas to ensure proper and effective monitoring/scanning.
- **Regular In-Service Training:** 1) Lifeguards should participate in regular and consistent in-service training that, among other topics and skills (i.e. practicing the EAP and rescue skills), includes accident prevention.
- **Promotion of Swim Skills and Water Safety:** 1) Buddy System – Encourage patrons to use the buddy system when swimming so they may assist one another if/when in distress. 2) Swim Lessons – Offering swim lessons can help improve the patrons' water skills and confidence leading to a reduction of accidents.
- **Risk Assessment(s):** 1) Regular checks and equipment to ensure functionality prior to each lifeguard shift. 2) Facility and environmental checks for hazardous conditions (i.e. slippery decks, broken chairs, etc.) and inclement weather. 3) Maintaining facility cleanliness.



Figure CI.5



### ECONOMICAL & ACCESSIBLE COURSES:

Consider taking another specialized course or becoming a WASH Instructor  
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# Legal Information for Lifeguards



## Good Samaritan Laws

Good Samaritan Laws are designed to protect people who provide needed emergency care in good faith and with no duty to act and/or not received any type of compensation in return. Hence, in some cases and in some states, professional rescuers including lifeguards are not covered under these laws as they have a duty to act and are, typically, compensated in some way for their services.

Almost every state has these laws although, they differ slightly from one state to another. Generally speaking, for the emergency caregiver to be protected under the scope of these laws, he or she must not act outside the scope of his or her training or be negligent with the care provided.

A lifeguard, to limit his or her liability, should become familiar with and understand how the following legal considerations fit with the Good Samaritan Laws in his or her state:

- **Duty to Act** – One must provide the care for which one has been trained and certified to provide.
- **Standard of Care** – One is legally expected to provide an industry minimum standard or level of emergency care to all victims. Care that is provided should always be within one's scope of training and level of certification.
- **Negligence** – One is expected to provide care only to his or her level of training – one should never provide care beyond the scope of his or her training. One must also provide emergency care that is appropriate or recommended for the condition(s) of the victim. The emergency care one provides must adhere to the proper sequence and delivery that was learned and practiced during training.
- **Consent** – All certified first responders must obtain permission from all victims prior to initiating emergency care. One should identify him or herself by name and level of certification. Then, one should ask the victim permission to provide him or her with the appropriate emergency care. In the absence of consent, emergency care may not legally be provided.
- **Refusal of Care** – A victim has the legal right to decline or refuse care of any kind and at any time even if emergency personnel deem the care necessary. Parents and legal guardians may also decline emergency care for their minor children. These declinations must be legally honored and care must not be provided. One should document the refusal of care with a standard form used by one's organization for such a purpose and be kept on file – it is important to have the form signed by both the emergency caregiver and person refusing the care.
- **Abandonment** – One may have a legal obligation to provide the appropriate emergency care to a victim. Once this care is initiated, one cannot discontinue the care until and unless at least one of the following occurs:
  - Victim(s) no longer requires emergency care
  - A person of equal or higher certification takes over the emergency care
  - The scene become unsafe for one to continue providing the emergency care
- **Confidentiality** – Any information related to the victim's identity, injuries, medical statutes or history, and circumstances related to his or her injuries is considered confidential and cannot be disclosed or shared by any one with third parties.
- **Documentation** – Make official written record of all information related to the incident, care provided, and circumstances leading to and surrounding the need to administer emergency care.

Additionally, one's facility is likely to have a variety of forms requiring completion on a daily basis, twice daily basis, weekly basis, and/or when an emergency occurs (as discussed above). No matter the form one is completing, it is important to be thorough, detail-oriented, truthful, and timely in doing so. It is always best to have the information for the report being completed fresh in one's mind to avoid confusion and forgetfulness.

In most cases, documents a lifeguard completes on a daily or weekly basis are required by local or state statute or regulation and can be inspected by the health department. These documents can also be subject to legal subpoena.

## CHAPTER ONE RECAP

- 1.) Good Samaritan Laws are designed to protect professional rescuers.
  - a. True
  - b. False
  
- 2.) Please list the legal considerations a lifeguard, to limit his or her legal liability, should become familiar with and understand how the considerations fit with the Good Samaritan Laws in his or her state or other jurisdiction.

- 3.) Why is it important for lifeguards to complete reports in an accurate and timely manner?

- 4.) Please provide the primary responsibility of a lifeguard as you understand it:

- 5.) Once you have successfully completed the World Academy of Safety & Health (WASH) lifeguard certification training course, there is no need to attend additional skills practice sessions, in-service trainings, or pre-season refresher trainings?
  - a. True
  - b. False
- 6.) The Professional Lifeguard is:
  - a. Dependable; arrogant; firm; knowledgeable; skilled; polite
  - b. Dependable; rule bender; polite; firm; knowledgeable
  - c. Confident; knowledgeable; polite; highly-skilled; dependable
  - d. Firm; polite; not reliable; highly-skilled; confident
- 7.) It is important for the lifeguard to take care of his or her health including remaining hydrated and using sun protection?
  - a. True
  - b. False
- 8.) What is Preventative Lifeguarding? How does a lifeguard practice preventative lifeguarding?

# Personal Protective Equipment – Chapter 2

**OBJECTIVE(S):** 1. Define bloodborne pathogens; 2. Identify the standard precautions to be used when providing emergency care; 3. Identify the methods & best practices to prevent exposure to bloodborne pathogens; 4. Identify and explain the best practices when dealing with fecal matter in the swimming pool.

Personal Protective Equipment (PPE) includes any item used and/or worn that limits one's exposure to bloodborne pathogens, while providing emergency care to a victim. Bloodborne pathogens are bodily fluids, including blood and spinal fluid. There are a variety of types of PPE used by lifeguards, medical professionals, and other first responders. The most common piece of PPE is protective gloves. Many organizations use nitrile gloves to eliminate possible allergic reactions to latex gloves.

The lifeguard must take time and the necessary steps to protect him or herself. Of course, as much as is possible, this type of preparation should occur prior to an emergency occurring. Some steps the lifeguard can take to self-protect include:

- Ensuring his or her hip pack and/or first aid kits contain all of the needed PPE such as masks or face shields, nitrile gloves, biohazard bags, gauze, goggles, and other equipment.
- Ensuring all rescue gear is functional prior to your lifeguard shift.

Always remember to access and use one's PPE even before one knows it is needed – the rule of thumb should always be to don the PPE in case it is needed later during the emergency care process.

For example, a patron approaches a lifeguard not feeling well but there is no sign of bodily fluid. Prior to initiating care and/or examining the patron, the lifeguard should put on his or her gloves in case there is risk of exposure later during the emergency care process.

PPE standard precautions for lifeguards include: gloves, hand washing after patient contact or care, and optional PPE based upon the specific situation. These optional PPE measures include: CPR masks, aprons/gowns, face and eye shields or other protection, and proper disposal of contaminated gauze, bandages and other first aid materials.

## Glove Removal

Pinch one glove at the wrist and peel it away from the hand, down to the fingers and inside out. Using the covered fingers, pinch the other glove and peel it away from the hand and down inside out leaving the first glove inside the second glove.

## Exposure to Bloodborne Pathogens

If one believes he or she (or a co-worker) has been exposed to any bloodborne pathogens, it is crucial that the following steps are immediately taken:

- Thoroughly wash and decontaminate the area(s) as best as possible and for at least 5 minutes, using soap and warm water.
- If any bloodborne pathogens get in, on, or around one's eyes, they must be flushed for at least 20 minutes with sterile water or saline solution.

All facilities should have a bloodborne pathogen exposure policy and procedure. This can, typically, be found in the operations manual and/or employee handbook. The exposure plan may differ slightly from one facility to another but, each should have a few of the same key components. These include:



Figure C2.1

- Seeking immediate medical care for those exposed and/or thought to have been exposed.
- Documenting and reporting the exposure with facility supervisors and management.

## Disposal and Cleaning of Contaminated Materials

It is important that proper disinfecting and disposal of contaminated and/or soiled equipment and materials be addressed in each facility's bloodborne pathogen plan.

In addition to PPE for lifeguards and staff, each facility must have controls in place for the proper disposal of biohazard materials (i.e. contaminated or soiled items). For example, there must be biohazard bags and biohazard sharps plastic container(s). These must be easily sealable and be properly labeled. The sharps container must be able to withstand the objects placed inside without being punctured or leaking. Facilities might also consider 'blood spill' kits for cleanup on or around the pool deck and other areas of the facility.

Anytime pool facility and/or lifeguard equipment becomes contaminated during an emergency, the items(s) must be properly disinfected prior to being placed back in service. To accomplish this, utilize a 10% bleach to water solution to scrub the equipment.

The area of any spills must also be cleaned and disinfected prior to reopening or that area being utilized. To accomplish this, ensure the area is closed and not accessible to others. Then, use the same 10% bleach to water solution to apply to the area and let it stand for a few minutes prior to sweeping it all up.

Always remember, when handling contaminated or potentially contaminated equipment and materials, to wear your PPE.

All facilities should have a bloodborne pathogen exposure policy and procedure. This can, typically, be found in the operations manual and/or employee handbook. The exposure plan may differ slightly from one facility to another but, each should have a few of the same key components. These include:

## Fecal Matter Cleanups

Any time there is a fecal incident in the pool or hot tub, the lifeguard(s) should, as quickly as possible, remove it using a net, a skimmer, or a bucket. Patrons should be immediately removed from this swimming area.

It is best at this point, to notify management so that the facility's pool maintenance team and/or certified pool operator can properly clean and disinfect the equipment used during the cleanup and can properly disinfect the pool water by shocking or using an alternate method.

Bathers should not be permitted back in the swimming area until the certified pool operator and facility manager approve it.

## CHAPTER TWO RECAP

1.) Please describe what is meant by Standard Precautions:

2.) Ultimately, it is each lifeguard's responsibility to ensure his or her first aid bag and/or hip pack is stocked with PPE?

- a. True
- b. False

3.) Bloodborne Pathogens are:

# Risk Management & Safety – Chapter 3

**OBJECTIVE(S):** 1. Identify & explain general facility risks; 2. Explain how to identify and manage risks to patrons and staff.



Figure C3.1

Anything that may cause injury and/or could be a hazard to patrons, co-workers, vendors and contractors, or others must be routinely inspected and repaired as needed.

Remember, the primary purpose of a lifeguard's presence is the safety and well-being of the people (patrons and co-workers) at the aquatic facility. Later, we will discuss patron surveillance and emergency response in greater detail. In the meantime, understand that patron surveillance, emergency response and overall patron safety are the lifeguard's only responsibilities.

The lifeguard's liability, as it pertains to safety, extends well beyond the safety of swimmers. Most facilities should and do have protocols in place for lifeguards to inspect and report the status of the pool deck and equipment as well as other areas such as the pump rooms, locker rooms and bathrooms, and chemical storage areas.

Patron surveillance and emergency response is only part of keeping swimmers safe. The rescue equipment must also be in good working condition and ready to be used at a moment's notice. Each time a lifeguard prepares to begin his or her shift, all of the equipment must be inspected to ensure it will properly function during an emergency. Additionally, first aid kits must be checked to ensure adequate inventory of supplies. Of course, any issue with equipment and/or lack of first aid supplies must be immediately reported. The pool should not open to swimming until and unless all equipment is stocked and in good working condition.

The overall safety and the appropriate policies, protocols, inspections and checklists are, ultimately, the responsibility of the aquatics director or other facility manager. However, liability for these items and areas – the unguarded areas – will fall upon all involved including the lifeguard(s) who should have been inspecting, reporting, and documenting dangerous conditions.



Figure C3.2

## Inclement Weather Conditions

Weather can impact swimmers and others on or around the pool deck at both indoor and outdoor facilities.

It is never safe for any person to be on, in, or near the water during an electrical storm or during other dangerous weather conditions.

Always follow the facility's weather policy and pay close attention to the local forecast and other weather warnings.

Generally speaking, as soon as there is any sign of inclement weather (i.e. thunder, lightning or dangerous winds) moving into the area, the lifeguard(s) should:

- Immediately get down from the lifeguard station or other elevated position.
- Clear swimmers from the water.
- Clear patrons from the pool deck (or beach at waterfront facilities).
- Clear patrons from all other outdoor areas of the facility.

At outdoor facilities, patrons should be directed to seek shelter indoors until the storm has passed. If the facility does not have an indoor area for patrons to use to seek shelter, management should consider alternate arrangements to keep patrons safe. For example, it may be possible to use the inside of adjacent businesses such as hotel lobbies, retail stores, or other large buildings during storms.

In some cases, the facility may have a lightning detector which will alert the management staff when lightning is in the area. Sometimes, this allows the lifeguard(s) to get a head start on clearing the areas listed above prior to the arrival of an electrical storm.

Patrons should not be permitted to re-enter the pool or other outdoor public area at the facility until thirty (30) minutes has passed since the last rumble of thunder or lightning sighting.

There are other weather conditions that may not be dangerous for patrons on or around the pool deck but, are unsafe for patrons in the pool. These include fog, heavy rain, or any other condition that impair the lifeguard's ability to clearly see the patrons in the pool and/or impair the lifeguard's ability to clearly see the bottom of the pool. In these cases, swimmers must be cleared from the swimming area until conditions improve enough to allow patron surveillance to resume safely.

## Water Chemistry

Lifeguards must be aware of the critical importance of ensuring safe and healthy aquatic environments. The fundamentals of pool management and water chemistry include water testing, chemical balance, and filtration systems. Lifeguards, pool operators, and aquatic facility supervisors should all be well-versed in preventing recreational water illnesses. Maintaining proper disinfection levels and water circulation is critical to ensure the safety of aquatic facilities but also contributes to the overall well-being of individuals engaging in aquatic activities.

A pool should be closed for bad water chemistry when crucial parameters deviate from recommended levels. These parameters encompass pH, chlorine levels, alkalinity, and cyanuric acid concentration. Imbalances in these factors can lead to a host of issues, including skin and eye irritation, bacterial growth, and diminished water clarity, compromising the overall safety and well-being of pool attendees. All aquatics facilities must emphasize regular water testing and immediate corrective measures to ensure compliance with local health department protocols and safety standards. By adhering to such protocols, aquatic facilities can uphold the highest standards of water quality and mitigate potential health hazards.

- **pH Levels:** Regulations generally require pool water to maintain a specific pH range (typically between 7.2 and 7.8). Proper pH levels ensure comfort for swimmers and optimize the effectiveness of disinfectants.
- **Chlorine Levels:** Free chlorine levels must be maintained within a specified range (often 1 to 3 ppm for public pools). This is essential for effective disinfection and the prevention of waterborne illnesses.
- **Total Alkalinity:** Regulations often set guidelines for total alkalinity (usually between 80 and 120 ppm) to help stabilize pH levels and improve water quality.
- **Cyanuric Acid:** For outdoor pools, regulations may specify acceptable levels of cyanuric acid (commonly 30 to 50 ppm) to protect chlorine from degradation by sunlight.

## Water Sanitation

- **Disinfection Requirements:** Pools must be sanitized regularly to prevent the growth of harmful pathogens. Common disinfectants include chlorine, bromine, and ultraviolet (UV) systems. Regulations typically require a specific level of disinfectant to be maintained.
- **Filtration Systems:** Pools must have an adequate filtration system to remove debris and contaminants. Regulations may specify the turnover rate (the time it takes for the entire volume of water to pass through the filter) based on the pool type (e.g., public, residential).
- **Regular Testing:** Pools are required to conduct regular water quality testing, often multiple times a day, to monitor pH, chlorine levels, and other chemical parameters. Testing logs may need to be maintained and available for inspection.
- **Backwashing and Maintenance:** Regulations often require regular maintenance of filtration systems, including backwashing, to ensure optimal operation and sanitation.

## Pool Capacity

- **Maximum Capacity Limits:** Regulations typically set maximum capacity limits based on the pool's size and design. This ensures that the number of swimmers does not exceed the pool's safe operating limits, preventing overcrowding and enhancing safety.
- **Square Footage Guidelines:** Many jurisdictions specify a certain number of square feet of water surface area per swimmer (e.g., 15 square feet per person). This calculation helps determine the maximum allowable occupancy.
- **Signage:** Pools are usually required to post clear signage indicating the maximum capacity, helping to enforce compliance among patrons.

### CHAPTER THREE RECAP

- 1.) A lifeguard's liability, as it pertains to safety, can extend well beyond the safety of swimmers.
  - a. True
  - b. False
- 2.) Patron surveillance and emergency response is only part of keeping swimmers safe. The rescue equipment must also be in good working condition and ready to be used at a moment's notice. Each time a lifeguard prepares to begin his or her shift, all of the equipment must be inspected to ensure it will properly function during an emergency.
  - a. True
  - b. False
- 3.) The overall safety and the appropriate policies, protocols, inspections and checklists are, ultimately, the responsibility of the aquatics director or other facility manager. However, liability for these items and areas – the unguarded areas – will fall upon all involved including the lifeguard(s) who should have been inspecting, reporting, and documenting dangerous conditions.
  - a. True
  - b. False

# Enforcing Rules – Chapter 4

To ensure safety at swimming facilities, it is important for management and staff to:

- Establish a set of rules.
- Develop lifeguards' understanding of the rules.
- Consistently and firmly enforce the rules & educate patrons about these rules.

The very first step to enforce rules at a swimming facility is to have well established rules, regulations, protocols and procedures. There should be a set of rules that are, relatively, standard from one facility to another. Then there are, typically, additional rules that are specific to each facility and its unique circumstances. The goal should always be ensuring patron safety.

Rules should be posted in multiple high-visibility locations. For example, all patrons should be made aware of the rules and expectations prior to entering the pool area. With this in mind, facilities should be sure to post the rules on the entrance door(s) or gate(s).

Lifeguards must know and understand the rules and how best to consistently and firmly enforce them. This may require a facility in-service training session where the lifeguards are presented with a variety of scenarios and asked to role play, while being provided feedback and coaching, the response to the patron(s).

If the pool is part of a Homeowner's Association (HOA), apartment complex, operates as a membership facility, the rules should be included with initial and annual paperwork and/or the rules language should be added to governing documents. In these types of facilities, management may consider penalties for repeated violation(s) of the rules and regulations.

Often times, people who may have demonstrated unsafe behavior in violation of the rules or the spirit of the rules and/or engages in or does not align with the published rules, may react and become confrontational. Lifeguards should be trained by the facility on how best to handle such a situation by attempting to de-escalate and contacting management immediately. Additionally, there should be language in the rules and/or governing documents that outline stiffer penalties for such confrontations and reactions to rules enforcement.

Aquatic and pool facility lifeguards and staff members should take the time to educate patrons. This serves multiple purposes all of which will make the lifeguard's job of rules enforcement a bit easier and the facility a bit safer. For example, if deck managers, facility managers, lifeguards (not responsible for patron surveillance), and other staff members take the time to circulate and speak with patrons informing and explaining why it is important that they adhere to the rules it may eliminate or limit violation of these rules later. This will allow the on-duty lifeguards to remain focused on scanning and patron surveillance.

Additionally, patrons tend to be more receptive to rules enforcement if they understand the need for the rule(s). Hence, taking the time to speak with patrons as opposed to, simply, blowing the whistle may turn out to be more productive in the long run. Remember, if one has scanning and patron surveillance responsibilities one must never leave his or her zone of coverage or discontinue these scanning duties to speak with a patron. Instead, the facility should employ a deck manager or other person who interacts with and educates patrons.



Figure C4.1



Figure C4.2

## Example of Pool Rules

Take a shower prior to entering the pool.

No glass, sharp metal objects, or other objects (deemed hazardous by lifeguard or management) permitted in pool area.

No running on the pool deck.

No diving.

Except for service animals, no pets permitted in the pool area.

Use of the pool while under the influence of alcohol or drugs is not permitted.

Use of the pool if one has open wounds, contagious or infectious conditions is not permitted.

Children under 16 years of age must be accompanied by an adult.

Use of the pool by children with diapers is not permitted without rubber or plastic pants over the diaper.

Smoking is not permitted.

Food and drink in the pool is not permitted.

## Voluntary Hyperventilation & Breath-Holding

Voluntary breath-holding has been cited as a cause of drowning incidents at various water depths. There are a few different descriptions of this condition with some based on the outcomes and others based upon the behavior that leads to the outcomes<sup>4</sup>. For example, one may see it referred to as underwater blackout, breath-holding blackout, and shallow water blackout. Shallow water blackout is technically defined as, “a loss of consciousness caused by cerebral hypoxia towards the end of a breath-hold dive in shallow water. It is typically caused by hyperventilating just before a dive, which lowers the carbon dioxide (CO<sub>2</sub>) level and delays the diver’s urge to breathe”<sup>2</sup>.

Shallow water blackout is a bit misleading as the condition can occur in water of any depth. Hence, some organizations, including WASH, have begun to refer to the condition as hypoxic blackout<sup>2</sup>. Though the overall rate of drowning deaths has been on the decline for decades, the rate of death by drowning as a result of breath-holding behaviors have not declined<sup>3</sup>. Lifeguards must be made aware of the dangers of breath-holding activities and hyperventilation which has been linked to hypoxic blackout because “. . . .if lifeguards are not aware of behaviors such as intentional hyperventilation, the risks of adverse events are significantly increased”<sup>2</sup>.

It is important that voluntary breath-holding activities be prohibited at all pools and aquatic facilities. This is a rule that must be added and prominently displayed on all rules postings. Additionally, training for lifeguards on what breath-holding activities might look like on, in, and around the water must be provided as part of a facility’s regularly scheduled in-service program.

## Deep Water Swim Test Requirement

Implementation of risk prevention protocols can ensure the safety of all aquatic facility patrons. One such policy is a deep-water swim test. All aquatics facilities should develop and enforce such a policy. It is recommended that all patrons wishing to swim in the deep end of the pool pass a swim test that includes: minimum swimming ability/skill, breathing control, and endurance. At a minimum, patrons should be made to successfully demonstrate/complete: floating on back for 30 seconds, tread water for 30 seconds, and swim a forward stroke for 2 lengths of the pool.

# Drowning Process – Chapter 5

**OBJECTIVE(S):** 1. Identify general facts with regard to accidental drowning incidents across the world; 2. Define drowning; 3. Explain the drowning process.

## Drowning Statistics

From 2005-2014, there were an average of 3,536 fatal unintentional drownings (non-boating related) annually in the United States – about ten deaths per day<sup>5</sup>.

An additional 332 people died each year from drownings in boating-related incidents<sup>6</sup>.

About one in five people who die from drowning are children 14 years of age and younger<sup>5</sup>. For every child who dies from drowning, another five receive emergency department care for nonfatal submersion injuries<sup>5</sup>.

Globally, more than 4 people die by drowning every hour of every day. Drowning is one of the top 10 leading causes of death for children in every region of the world<sup>5</sup>.

## What is Drowning

1. Water is inhaled & the drowning person has an adrenaline rush as they struggle for air.
2. The airway begins to close to prevent more water from getting into the lungs. At this stage, the victim involuntarily holds his or her breath until he or she loses consciousness. This process takes between 2-3 minutes.
3. The victim loses consciousness. Effective resuscitation can still save the victim and he or she still has a chance of survival. The victim will stop breathing and his or her pulse rate slows down.
4. In the absence of oxygen, the victim's body turns a shade of blue and may begin erratically jerking as if convulsing.
5. The final stage of drowning is called cerebral hypoxia and this is followed by clinical death.

## Common Causes of Drowning

There are a few common causes of drowning. Of course, drowning incidents are most prevalent where no lifeguard is on duty. The RID Factor (Pia 1984) – Recognition, Intrusion, and Distraction – have been identified as causes of drowning incidents where lifeguards are present.

**Recognition** – The lifeguard staff failed to recognize the signs and/or symptoms of drowning. This could be the result of a lack of knowledge about what to look for or it could be the result of the victim already being submerged. The victim could have also slipped under the water without exhibiting any signs of distress or drowning.

**Intrusion** – Other duties have interfered with the lifeguard's primary responsibility of patron surveillance. For example, cleaning or maintenance duties were assigned and completed while the lifeguard had surveillance responsibilities. Hence, the proper scanning was not adequately completed.

**Distraction** – The lifeguard has the potential to become distracted by a multitude of things. It could be that he or she was bored, tired, engaged in conversation with a patron or colleague, or engaged in another activity that caused him or her to be distracted from scanning and patron surveillance.

## CHAPTER FIVE RECAP

- 1.) The drowning process:
  - a. Begins when water is inhaled
  - b. Begins when a struggling swimmer panics
  - c. Begins when the victim loses consciousness
- 2.) According to data from the CDC, drowning is one of the leading causes of death for children in every region of the world?
  - a. True
  - b. False
- 3.) Explain the RID Factor:

# *Patron Surveillance – Chapter 6*

**OBJECTIVE(S):** 1. Explain the concept of zone coverage when providing patron surveillance; 2. Explain the concept of back-up coverage and explain how it is applied during an emergency.

## **Surveillance**

Lifeguards in pool environments can utilize a variety of methods to engage in patron surveillance. It also occurs from many vantage points depending on the environmental conditions, layout of the swimming area, training level of the lifeguards, and available equipment.

The most traditional method of watching swimmers is from an elevated lifeguard station or chair. In some locations, there is one lifeguard assigned to each chair while in other locations, there are two lifeguards assigned to each chair.

Other widely used methods of patron surveillance include making use of: walking along the pool deck and placing additional lifeguard in the swimming pool.

## **Zone of Coverage**

Zone of coverage for lifeguard staff are designed specifically for each facility based upon that facility's unique needs, size and layout. Here are several types of zone coverage yet all of the types operate using the same basic principles.

These are:

1. The entirety of the zone must be visible from one spot for the assigned lifeguard.
2. The lifeguard must be able to scan his or her entire zone on ten (10) seconds or less
3. The lifeguard must be able to get to the farthest area of his or her zone in twenty (20) seconds or less.
4. The lifeguard must be able to recognize a victim and provide assistance to this victim in no more than thirty (30) seconds.

## **Full Coverage**

Only one lifeguard is on duty. Hence, that lifeguard is responsible for patron surveillance and constant scanning of the entire coverage area. This lifeguard must recognize and respond to any and all emergencies – land or water.

## **Overlapped Coverage**

Two or more lifeguards are on duty together with each being able assigned an area of coverage. Although, each lifeguard has a direct responsibility for patron surveillance in a specific area, there is an area where the two zones meet or overlap. In this area, both lifeguards have scanning duties.

## **Back-Up Coverage**

Two or more lifeguards are on duty together. During an emergency that requires a single rescuer response, the primary rescuer (first lifeguard) responds and the second lifeguard immediately provides what is referred to as back-up coverage.

The back-up lifeguard must be prepared to provide a variety of responses. For example, the back-up lifeguard may need to clear the water; provide direct assistance to the primary rescuer; and/or communicate with facility management and/or local EMS.

# Scanning – Chapter 7

**OBJECTIVE(S):** 1. Understand and be able to execute proper scanning techniques; 2. Understand the characteristics & mechanics of a proper lifeguard rotation; 3. Demonstrate an effective lifeguard rotation.

## Proper Scanning

Effective surveillance and proper scanning occurs in three stages – with the first two stages being part of the Recognize Phase and stage three being part of the Respond Phase of the Three R's:

1. Scanning & Sizing Up
2. Focusing & Sizing Up
3. Activating EAP

Surveillance of patrons or swimmers is a learned and developed skill. The lifeguard must know and understand effective scanning techniques, zones or areas of coverage, signs and symptoms of distress in the water and pre-cursors or patron characteristics that often lead to future trouble in the water.

To properly and effectively **scan and size up**, the lifeguard must visually inspect his or her assigned area while looking for the common signs and symptoms of distress or drowning. Additionally, the lifeguard must, at a minimum, be looking at the surface of the water. Though, it is strongly recommended that the lifeguard also observe, where possible, the water column and the bottom of the swimming area.

If the lifeguard observes anything unusual, erratic or otherwise concerning he or she should **focus** on the swimmer exhibiting this behavior and/or the area of the pool where the activity is taking place and **size up again**. The lifeguard should attempt to visually inspect what is taking place below the water's surface in this area as well. The process of surveillance should be repetitive and constant while the lifeguard has an area of coverage or responsibility for patron or swimmer safety.

If the lifeguard decides, based on his or her sizing up activities, that a response is required then the facility Emergency Action Plan (EAP) should be immediately activated. EAP's are discussed later in this manual.

Scanning can be difficult when the lifeguard is dealing with any of the following: glare; fatigue; special aquatic features in the pool; and blind spots.

Depending upon the facility's layout, there may be areas of the swimming area not visible to the assigned lifeguard(s). In these cases, the lifeguard(s) should adjust his or her position and/or stand up to see these blind spots. It may also require the lifeguard(s) to walk around to be able to see the entirety of his or her assigned area including all blind spots within that area. Blind spots could be a result of the design of the pool or facility or they could be a result of a high volume of bathers in the same area of the swimming pool.

There could be aquatic features such as fountains, waterfalls, and bubble systems within a lifeguard's assigned area that can cause water movement and, in turn, make it difficult for the lifeguard(s) to see the water column and the bottom of the pool. The lifeguard(s) must reposition to ensure he or she has the ability to see the water column and the bottom of the pool. If, at any time, this becomes impossible, the features should be turned off or swimmers should be moved from that area of the pool.

A lifeguard's ability to effectively scan his or her zone and see swimmers in the water column and on the bottom of the pool can also be negatively impacted by poor water quality (i.e. cloudy pool). A lifeguard must be able to clearly see the main drain or other filter grate at the bottom of the pool. If the water ever becomes too cloudy to see the grate, the pool must be closed until the quality of water can be restored and the lifeguard, again, is able to see the pool's bottom.

Sun glare can make it impossible for lifeguard(s) to see the bathers both on the water's surface and in the water column. Polarized sunglasses can help mitigate the impact of sun glare. At times, the glare may be extreme and the lifeguard must reposition him or herself and/or work with the aquatics director to reposition the lifeguard station to ensure he or she has the ability to see all swimmers and areas within his or her zone of coverage.

## Rotations

When we refer to lifeguard rotations, we are referring to the practice of lifeguards moving from one guard station to another and/or to the break room or to perform other facility-related duties throughout his or her shift (Note: please remember that lifeguards should never be assigned to perform any other duties while he or she is responsible for patron surveillance).

Ideally, lifeguard rotations should take place every 20-30 minutes. The rotation cycle should also include a 10-15 minute break for every lifeguard.

Various factors impact a lifeguard's ability to maintain focus and attention on patron surveillance and scanning duties. These factors often include, depending upon the aquatic facility's setting, both indoor and outdoor environmental factors such as the sun's UV rays, heat, humidity, sun glare, and more. At times, these factors can contribute to lifeguard fatigue and lack of attention.

Lifeguard rotations are designed to mitigate these environmental factors and fatigue while helping to ensure the lifeguard remains vigilant with his or her duties.

### Steps of an Effective & Safe Rotation

The transition from one lifeguard to another must take place in a manner consistent with constant patron surveillance. At no time during the transition should patron surveillance be compromised. There must always be at least one lifeguard maintaining surveillance duties.

Steps:

1. Incoming lifeguard stands next to the lifeguard station, careful not to impede the view of the lifeguard in the stand.
2. Incoming lifeguard begins patron surveillance from the standing position and communicates this to the lifeguard in the stand.
3. Lifeguard in the stand passes the rescue tube to the incoming lifeguard; gathers belongings; exits the lifeguard stand; maintains a standing position and patron surveillance on the opposite side of the stand from the incoming lifeguard.
4. Outgoing lifeguard maintains patron surveillance while incoming lifeguard gets situated in the stand and takes over patron surveillance and communicates this to the outgoing lifeguard.
5. Outgoing lifeguard is now free to move on to the next lifeguard station in the rotation cycle.

# Victim Recognition – Chapter 8

**OBJECTIVE(S):** 1. Understand and be able to recognize the signs & symptoms of a distressed swimmer; 2. Identify the factors that may lead to accidents and incidents of drowning at guarded facilities.

## Victim Recognition

Not all drowning victims exhibit the same behaviors. Generally speaking, a victim:

- is unable to make any forward progress in the water – all movements are being used in an attempt to get air.
- has both arms extended to the side and is simultaneously slapping the water with both hands or is pushing down on the water trying to support him or herself and stay above the water.
- is vertical in the water with an ineffective or no kick or,
- is horizontal in the water with the face down in the water.

Drowning victims may be vertical in the water with the head tilted back with the face looking toward the sky or the horizontal victim may have his or her head face down in the water. In either case, the victim is, typically, unable to shout or wave for help. Without assistance, the victim will eventually submerge and might continue to struggle in an effort to resurface. The struggle will cease as the victim becomes passive and unconscious below the water's surface. It is possible that some victims never exhibit a struggle and, instead, slip under the water and begin the drowning process – this is, usually, more difficult to identify than the victim on the water's surface.

The lifeguard is watching for:

- **Head low in the water** – The victim's face and mouth can submerge and resurface repeatedly as he or she struggles to get air and each time he or she gasps for air, water can be inhaled. A strong or healthy swimmer is easily able to keep his or her head high in the water and above the water's surface. A person unable to do this may require assistance.
- **Low Stroke** – A strong or healthy swimmer is easily able to bring his or her elbows out of the water with each swim stroke. A swimmer dragging his or her elbows in the water is a sign that he or she may require assistance.
- **Little to no kick** – A strong or healthy swimmer maintains a strong kick of his or her legs. No kick and/or no breaking of the water's surface with a kick is a sign that he or she may require assistance. Often times, the victim is more vertical than horizontal in the water when there is an ineffective kick.

Typically, a swimmer displays a low head in the water, a low stroke, and little to no kick simultaneously.

Additional signs of distress in the water include:

- **Hair in Eyes** – for most swimmers, brushing his or her wet hair off or away from the face and eyes is instinctive behavior. When a swimmer makes no attempt to do this, it should be seen as a sign of distress.
- **Grasping the Water with Both Arms** – when a swimmer struggles to keep his or her head above water and begins to panic, he or she begins to rapidly slap the surface of the water or slash both arms through the water with both hands at the same time. When a lifeguard observes this type of behavior, the lifeguard must immediately respond.
- **'Climbing the Ladder'** – when a swimmer struggles to keep his or her head above water and begins to panic, he or she begins to engage in what appears to be an upward crawl in the water. This is an ineffective method to keep one's head above water and, when observed, requires the immediate response from lifeguard(s).
- **'Bicycle Spokes'** – a distressed swimmer, as recognized by fellow bathers, with the distressed swimmer in the middle and fellow bathers moving toward him or her from all sides to provide assistance looks like a bicycle wheel with the good Samaritans being the spokes of the wheel and the distressed swimmer being at the center of the wheel.
- **Waving of the Hands** – a swimmer who may be tired yet is not yet in a panic or in dire need of assistance may wave his or her hands for assistance from lifeguard(s).
- **Unusual and/or Erratic Behavior or Activity** – any behaviors and/or activities exhibited by swimmer(s) that seem unusual or erratic should be given additional scrutiny to determine if a lifeguard response is required.

It is not always a linear progression from distressed swimmer to drowning.

There are situations in which a victim never displays the signs or symptoms of distress. Instead, they could already be submerged in the water and, therefore, the lifeguard never sees the signs of distress.

### CHAPTER SIX, SEVEN, EIGHT RECAP

1. Please list three signs of a swimmer in trouble in the water:

2. What is meant by Zones of Coverage:

3. Explain the difference(s) between full coverage, overlapped coverage, and back-up coverage:

4. Patron surveillance is a learned and developed skill.

- a. True
- b. False

5. List the steps of an effective lifeguard rotation:

# *Emergency Action Plan (EAP) – Chapter 9*

**OBJECTIVE(S):** 1. Identify and understand the Three “R’s”; 2. Explain the types & need for reliable communication from lifeguard to lifeguard and between lifeguard and other staff members.

An Emergency Action Plan (EAP) is an established set of protocols and procedures designed to be activated and followed during an emergency.

EAP’s are written procedures that must be presented to every staff member and practiced on a regular basis. The more familiar the lifeguard staff is with the EAP, the more efficient and effective the response will be during an actual emergency.

The EAP must be published, easily accessible and posted in visible locations for lifeguards to see. A well-designed EAP states, specifically, what each staff member should do, when he/she should do it, and exactly how to do it by outlining exact procedures.

Activation of the EAP must occur every time there is an emergency and/or a lifeguard or other staff member recognizes an emergency and/or victim. Typically, in an aquatic environment, activation of the EAP occurs with the whistle signal being used to signify a water or land-based emergency.

EAP’s are designed specifically for each facility and that facility’s unique layout, staffing, equipment, level of training and more. Rarely are two EAP’s exactly the same though many will have overlapping protocols.

Review and practice of the EAP must be a part of a facility’s routine In-Service Training or Continuing Education for all staff with a responsibility during an emergency.

It is advisable for training to be coordinated together with local EMS to ensure a well thought out, medically sound, and seamless response during an emergency.

This type of training should be conducted, at minimum, once per month for all staff members.

Effective communication and coordination is vital to the overall effectiveness and quality of the EAP and, in turn, the outcome for the victim(s). In many jurisdictions, the EAP is required by the health department and when the facility is inspected, the EAP will be examined.

Additionally, many insurance companies will ask for this document to ensure that the facility for whom they are providing insurance is taking proper risk management steps.

## **Communication**

All facilities must have a system of communication in place. This system must include a set of communication procedures that outline ‘call signs’ or other easily identifiable terms used for each person and/or location within the facility and methods of communication to be used (telephone, hand signals, handheld flags, whistles, megaphones, air horns, public address systems, two-way handheld radios, etc.).

The system should also address:

- Communication between lifeguards on the beach
- Communication between lifeguard(s) and swimmers/beachgoers
- Communication between in-water lifeguards and on-the-beach lifeguards
- Communication between lifeguards and supervisors
- Communication between aquatics staff and supervisors (or lifeguards) and other facility staff members
- Communication with local EMS services

In most organizations, communication between lifeguards is typically accomplished using one of three established systems – hand signals, whistle signals, and flag signals (i.e. semaphore). The communication systems must be standardized within a geographic area and from one organization to another within that area. This ensures rapid response and quality patient care by providing smooth and seamless interaction between all trained surf lifeguards during normal operations as well as during an emergency.

Some facilities who have worked closely with local EMS services may have a designated person with a two-way handheld radio that is able to connect directly to the EMS dispatcher. This can eliminate the need for telephone calls and may increase efficiency and response times during an emergency.

Local emergency telephone numbers as well as hotline numbers (i.e. poison control) should be posted and easily accessible at each swimming area and/or lifeguard station within a facility. This telephone number list must also be posted and available in any and all facility offices. It is advisable for any person responsible for calling any emergency phone numbers to keep these numbers saved in his/her mobile device.

## Communication with EMS

### 1. Clear Communication:

- **Contacting EMS:** Use a designated phone or intercom system to call 911 (or the local emergency number). Provide clear and concise information.
- **Information to Include:**
  - **Location:** Specify the exact location of the pool and any specific entry points for EMS.
  - **Nature of the Emergency:** Describe the incident (e.g., drowning, injury) and the condition of the victim(s).
  - **Number of Victims:** Inform EMS about how many people are involved and whether additional assistance is needed.
  - **First Aid Actions:** Briefly mention any first aid measures that have been initiated (e.g., CPR, bleeding control).

### 2. Ongoing Communication:

- Stay on the line if possible, providing updates to EMS as the situation evolves.
- Relay any additional information that may be relevant, such as changes in the victim's condition.

## Managing Patrons

### 1. Immediate Crowd Control:

- **Clear the Area:** Direct patrons away from the scene of the incident to ensure safety and allow for an unobstructed area for EMS and lifeguards.
- **Establish a Perimeter:** Use barriers or designate staff members to prevent unauthorized access to the area where the emergency is occurring.

### 2. Communicate with Patrons:

- **Calmly Inform:** Let patrons know that there is an emergency but avoid alarming them. Reassure them that help is on the way and that they should remain calm.
- **Provide Instructions:** If necessary, give clear instructions on where patrons should go or what they should do (e.g., stay in designated areas).

### 3. Designate Roles:

- **Assign Tasks:** If there are multiple lifeguards, assign specific roles (e.g., one to continue CPR, another to manage patrons, and another to assist EMS upon arrival).
- **Utilize Other Staff:** Involve other facility staff to help manage the situation, such as security or maintenance personnel.

### 4. Support for Victims' Family and Friends:

- If family members or friends of the victim are present, provide them with support and keep them informed without disclosing sensitive information.
- Designate a staff member to stay with them to answer questions and provide emotional support.

### 5. Post-Incident Management:

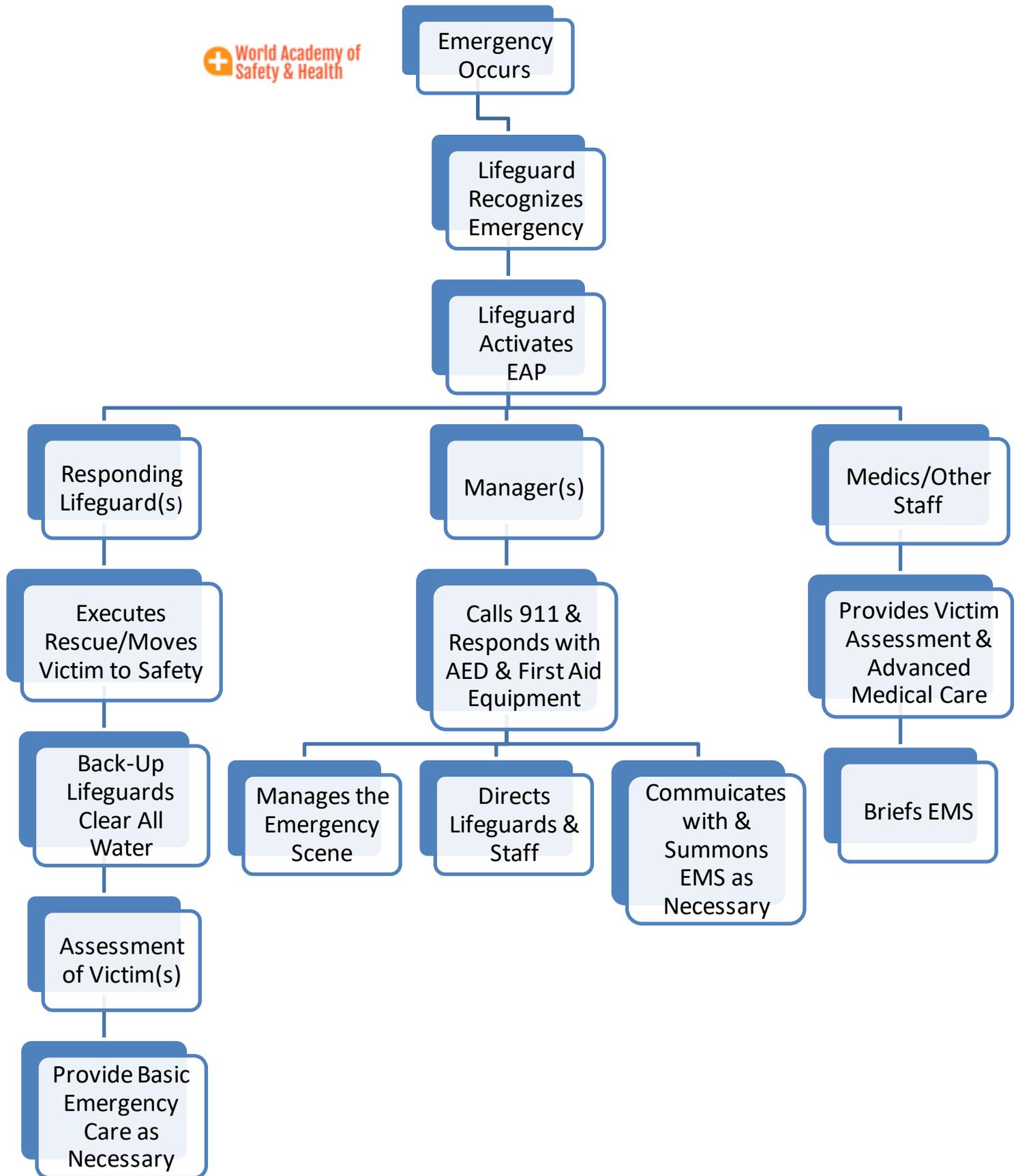
- **Debrief:** After the incident, conduct a debriefing with lifeguards and staff to discuss what happened, assess the response, and identify any areas for improvement.
- **Documentation:** Ensure that all details of the incident are documented thoroughly for future reference and training.

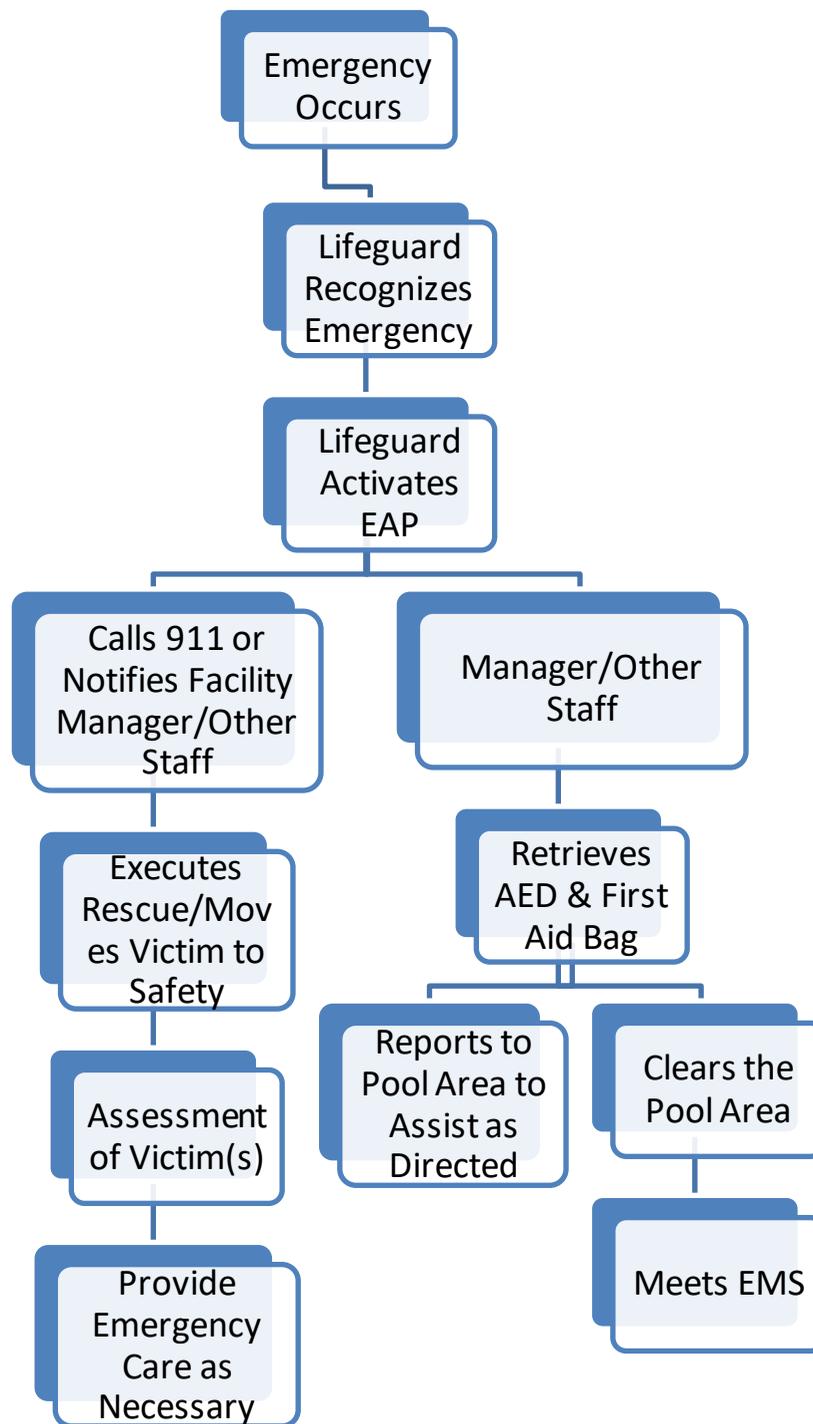
### 6. Mental Health Support:

- Offer support to staff who may be affected by the incident and provide access to counseling or debriefing sessions.

Effective communication with EMS and the management of patrons during an emergency are critical components of a lifeguard's role. By following established protocols, lifeguards can ensure a coordinated response that prioritizes safety and well-being.

# Aquatics Facility Sample Emergency Action Plan (EAP)





## CHAPTER NINE RECAP

- I. EAP stands for:
  - a. Emergency Action Plan
  - b. Emergency Alert Procedures
  - c. Environmental Action Plan
  - d. Evacuation Action Procedures
2. The facility's EAP should be published, easily accessible, posted in visible locations for staff to see.
  - a. True
  - b. False
3. EAP's are designed specifically for each facility's layout, staffing, equipment, level of training and more.
  - a. True
  - b. False

# Water Emergencies - Chapter 10

**OBJECTIVE(S):** 1. Explain when to use the walking assist, tossing assist & reaching assist; 2. Explain when to use the various water entries; 3. Explain when and how to use the passive victim rescue, active victim rescue, multiple victim rescue and submerged victim rescue; 4. Explain how to extract a victim from the water with multiple lifeguards as well as a single lifeguard; 5. Demonstrate water entries, victim assists, victim rescues, and victim extractions.

Immediately after recognizing a water emergency, the lifeguard must activate the facility's Emergency Action Plan (EAP) by whatever means is outlined in the plan – this is typically by using a specific whistle signal reserved for this purpose.

The lifeguard(s) then immediately moves into the respond phase and quickly assesses and decides whether to execute an assist or to signal a full rescue and enter the water to perform the water rescue. In either case, the lifeguard makes contact with the victim, executes the assist or rescue and safely begins to move the victim back to the beach for extraction from the water. The lifeguard should then assess the victim and provide any additional emergency care necessary.

A rescue or incident report should be completed prior to releasing the victim.

## Assists

Assists are used to help a tired swimmer without entering the water and/or signaling a full water rescue. There are two types of assists:

### Tossing Assist

Lifeguard tosses a ring buoy to the tired swimmer. This is usually utilized from an elevated position such as a dock, pier, platform, vessel. Steps to follow when using a tossing assist:

- Place the rope attached to the ring buoy on a flat surface and place foot on this rope. This ensures that the lifeguard has the ability to pull the victim to the platform once they grab the flotation device that is tossed.
- The lifeguard should toss the flotation device over the head of the victim and beyond or behind the victim. This ensures that the flotation device is not thrown short of the victim's reach. Instead, it lands behind the victim allowing the lifeguard to slowly begin pulling the throw line or rope in a controlled manner bringing the flotation device to the victim.
- Once the victim has a firm grip on the flotation device, the lifeguard should slowly pull the throw line without any sudden jerks of the rope to the edge of the platform.

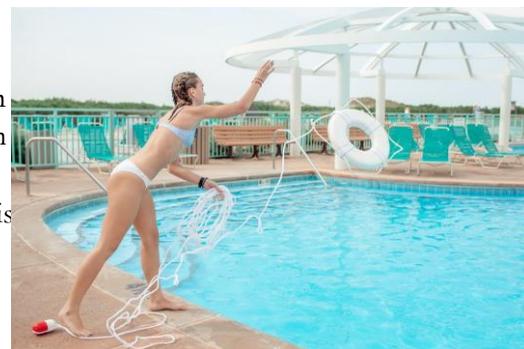


Figure C10.1



Figure C10.2

## Reaching Assist

Lifeguard extends a reaching pole, rescue tube or can, or his or her hand/arm to the tired swimmer. This is usually utilized from an elevated position such as a pier, dock, platform, or vessel. Steps to follow when using a reaching assist:

- Lifeguard should stand at the edge of the platform ensuring he or she has a strong base with feet shoulder width apart. The lifeguard should shift his or her weight back away from the edge of the platform to avoid the victim pulling on the reaching pole causing the lifeguard to be pulled into the water.
- Once the victim has a firm grip on the reaching pole, the lifeguard should begin to slowly and in a controlled manner use the pole to pull the victim to the side of the platform.



Figure CI0.3



Figure CI0.4

## Water Entries

### Cannon Ball Jump Entry

This entry should be used when the lifeguard is entering the water from a height – i.e. lifeguard tower or watch station. This entry can be used when the lifeguard is more than three (3) feet above the water and the water depth must be a minimum of five (5) feet.

The lifeguard should be wearing the rescue tube keeping it high and tight across his or her chest and under his or her armpits. The lifeguard should ensure his or her feet are flat on the ground/deck/lifeguard station and that his or her knees are slightly bent as if entering in a sitting position.



Figure CI0.5

### Scissors Jump Entry

This entry should be used when the lifeguard must enter the pool in an area of deep water directly from the pool's deck – the water depth must be a minimum of five (5) feet and the lifeguard should be no more than three (3) feet above the water.

The lifeguard should be wearing the rescue tube keeping it high and tight across his or her chest and under his or her armpits. The lifeguard should ensure his or her feet are flat on the ground/deck with a slight to no bend in his or her knees.

Prior to initiating water entry, the lifeguard must check the entry area to ensure it is clear and safe for entry. The lifeguard should then take one long step or stride off the deck and into the pool. Once the lifeguard makes contact with the water, he or she should immediately bring his or her legs back together as if closing a pair scissors. This action, along with the buoyancy of the rescue tube, will help bring the lifeguard back to the surface of the water so that he or she may begin the approach to the victim.



Figure CI0.6

## Slide-In

This entry should be used in two different circumstances:

1. If, during the lifeguard's check, the pool is too crowded to allow safe entry using either the cannonball jump entry or the scissors jump entry.
2. If the lifeguard suspects the victim may be suffering from spinal trauma.

Figure CI0.7



The lifeguard should be wearing the rescue tube and holding it with one hand as he or she sits on the edge of the pool deck. Once seated, the lifeguard should use one hand to push him or herself away from the deck while gently entering the water feet-first.

Though this entry is most commonly used in shallow water, it can also be used effectively in deep water with the lifeguard treading water or using the breaststroke.

Figure CI0.8



## Walk-In or Run-In

This entry should be used in a zero-depth environment.

The lifeguard should be wearing the rescue tube while holding it along with excess towline to avoid tripping. The lifeguard should enter the water by either walking or running through the shallow water to the victim.

Figure CI0.9



## Approaching the Victim

The lifeguard should always keep the rescue tube or rescue high and tight across his or her chest and under the armpits. This will allow the lifeguard to choose between the front crawl and the breaststroke. Either of these strokes can be used with a flutter kick, breaststroke or frog kick, or a scissor kick to approach the victim.

This placement of the rescue tube allows the lifeguard to:

- Easily keep it between him or herself and the victim to avoid being grabbed by a panicked victim.
- Approach the victim and execute the rescue in one fluid motion as the tube is already in position to execute the rescue (of a passive or active victim).

Figure CI0.10



## Water Rescues

Water rescues can come in many forms and can occur at any time. Lifeguards must always be prepared and expecting an emergency to occur.

### Rescue Tube

The lifeguard rescue tube should be on the lifeguard's person at all times when on duty and responsible for emergency response. To properly wear a rescue tube or a rescue can, the lifeguard should place one arm and his or her head through the strap so that the strap lays in a diagonal direction across the lifeguard's chest. Rescue tubes are available:

- in a variety of high visibility colors (i.e. red, orange, yellow, bright blue, etc...)
- in a variety of sizes with the most common being 40" and 50"
- in various buoyant materials with the most common being closed cell dense foam

Rescue tubes and rescue cans will:

- provide enough buoyancy for both lifeguard and victim
- help calm a panicked victim once he or she is able to grasp the rescue tube
- provide a barrier between the lifeguard and victim to prevent the lifeguard from being grabbed by a panicked victim

A lifeguard should never enter the water to execute a rescue without properly wearing the rescue tube or rescue can.

Always remember, it is vital for the lifeguard to activate the EAP prior to entering the water to execute a rescue and/or make contact with any victim.

### Contact and Control

Generally speaking, when a lifeguard contacts a victim, the rescue tube or rescue can provides a certain level of comfort to a victim and can help to mitigate the behaviors of a panicked victim. It is important for the lifeguard to protect him or herself from a panicked victim – the rescue tube or rescue can should always be kept between the lifeguard and the victim and used as a barrier to help prevent a panicked victim from being able to grab hold of an approaching lifeguard. If a victim is able to reach and grab a lifeguard, the tube should be immediately removed from the lifeguard's head and arm, pushed toward the victim, and the lifeguard should swim away from the panicked victim. Leaving the rescue tube with the panicked victim will keep him or her afloat until the lifeguard can re-approach and contact the victim safely.

# Rescue Procedure and Coverage

## Active Victim

An active victim is conscious. He or she can be a tired swimmer or a person who is actively drowning, struggling to keep his or her head above the water. The victim could be swallowing water.

Active victims may exhibit one or more of the following signs:

- Arms flailing to the sides of the body causing splash but not effective in maintaining buoyancy.
- Gasping for air at the water's surface.
- Little to no kick.
- Unable to wave, call out, or otherwise signal that he or she is in need of assistance as he or she is entirely consumed with survival and getting air.

## Active Victim Front Rescue

The active front rescue is the appropriate technique for a distressed or tired swimmer or a victim who might have moved beyond simply being tired or distressed but has yet to begin panicking or he or she may be in a state of panic. To perform the active victim front rescue, the lifeguard should:

- Activate the EAP.
- Rescuer enters the water using either the cannonball jump entry or the scissors jump entry and approaches the victim using either a front crawl or breaststroke.
- Prior to reaching the victim (and at least arm's length away from the victim), the rescuer should begin to push the rescue tube toward the victim asking him or her to firmly grasp it using both hands.
- Rescuer should continue to push the rescue tube into the victim's chest and begin to kick to move the victim to the side of the pool for exit or assisted extraction. The victim should continue holding the rescue tube with both hands.



Figure C10.11



Figure C10.12



Figure C10.13



Figure C10.14



### Active Victim Rear Rescue

It is most appropriate to utilize the Rear Rescue on active drowning victims who appear to be in the panic stage. To perform the rear rescue, the lifeguard will:

- Activate EAP.
- Use either the front crawl or breaststroke, with the rescue tube high and tight across one's chest and under one's armpits, to approach the victim.
- Swim to the rear of the victim just prior to being within arms-length of the victim (remember: the victim will not be able to turn or spin on the water as you approach him or her from the rear).
- Swim toward the victim's back until the rescue tube is against the victim's back while remaining under the armpits of the lifeguard.
- Place one arm under each armpit of the victim – right arm under right armpit and left arm under left armpit – ensuring that his or her elbows are directly under the victim's armpits. Lifeguard's hands can be in one of three positions:
- Placed on the front shoulders of the victim.
- One hand on the front shoulder of the victim while the other hand is released to help sidestroke the victim to the side of the pool.
- One arm can be repositioned so that it reaches over the top of the victim's shoulder and across the front of the victim's chest and under the opposite armpit until it is able to grasp the rescue tube. The other hand can be released to sidestroke the victim to the side of the pool.
- Attempt to calm the victim by talking to him or her, telling him or her your name and explaining what is happening and what will happen next.
- Lean backwards while pulling the victim with you until he or she is laying on his or her back on top of the rescue tube. The rescue tube should still be high and tight across the lifeguard's chest while the victim's back is laying on it (lifeguard may consider using a scissor kick or gg-beater kick to assist in gaining enough leverage to be able to get the victim on his or her back on top of the rescue tube).
- Swim the victim to the side of the pool for extraction from the water.



Figure CI0.15



Figure CI0.16



Figure CI0.17

1



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Active Victim Rear Rescue

2



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Active Victim Rear Rescue

3



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Active Victim Rear Rescue

4



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Active Victim Rear Rescue

5



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Active Victim Rear Rescue

6



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Active Victim Rear Rescue

7



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Active Victim Rear Rescue

8



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Active Victim Rear Rescue

## ***Passive Victim***

A passive victim is unconscious and can be floating on the water either face down or face up or the victim can be below the surface of the water and in the water column or on the bottom (submerged). It is common for a passive victim to be still with no movement (no arm or leg action, no breathing, no forward swimming movement). Passive victims can slip under the water as a result of any of the following: alcohol use or a medical condition such as a cardiac event, heat-related emergency, voluntary underwater breath-holding, seizure or head injury.

The lifeguard must remember that if he or she did not witness the victim becoming passive or submerged, the lifeguard must assume a spinal injury has occurred and treat the victim as such (see Chapter II).

If the lifeguard witnessed the victim become passive, then he or she will use one of the entries previously discussed and approach the victim using either the front crawl or breaststroke with the rescue tube tight and high under the armpits.

Lifeguards have two options when performing a rescue on a passive victim who is not suffering from potential spinal trauma.

### **Passive Victim Rear Rescue**

Though the rear rescue can be performed in any water depth, it is most easily performed in shallow water at a depth where the lifeguard can stand comfortably. When performing the rear rescue, the lifeguard will:

- activate EAP.
- use either the front crawl or breaststroke, with the rescue tube tight and high under the armpits, to approach the victim.
- The lifeguard has two techniques from which to choose when performing a passive victim rescue:

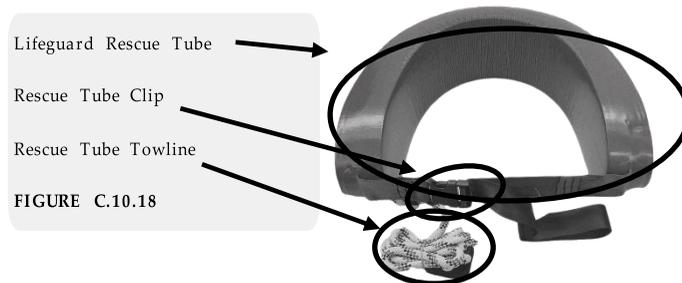
#### **Option #1**

- Lifeguard shall swim, using either the breaststroke or front crawl, to a spot adjacent and close enough to the victim that the lifeguard is able to place his or her hip against the hip of the face-down victim.
- Lifeguard shall reach across the back of the face-down victim with only the lifeguard's arm that is closest to the victim. Place this arm under the victim's armpit farthest from the lifeguard.
- Lifeguard shall place the rescue tube, simultaneously with reaching across the victim's back, between the lifeguard's chest and the victim's back.
- Lifeguard shall place his or her arm that is farthest from the victim under the victim's armpit that is closest to the lifeguard.
- Lifeguard shall walk or swim, using legs only, forward with the victim in the same direction that the victim's head is pointing. At the same time, the lifeguard shall roll the victim to the face-up position without discontinuing his or her forward movement with the victim.
- The rescue tube should be situated across the victim's back just below the shoulders.

#### **Option #2**

- Lifeguard shall swim to the victim using either the breaststroke or front crawl and the rescue tube high and tight across the chest and under the armpits.
- Lifeguard shall approach the victim from the rear, swimming onto the victim's back until the rescue tube is between the lifeguard's chest and the victim's back just below the victim's shoulder line.
- Lifeguard shall place both arms under the corresponding armpits of the victim.
- Lifeguard shall swim forward, in the same direction as the victim's head is pointing, while simultaneously rolling the victim to the face-up position.

Independent of which rescue technique the lifeguard chooses to use, the victim's airway must immediately be opened and breathing checked. If needed, the lifeguard shall provide 2 initial rescue breaths while the victim is still in the water and positioned on his or her back on the rescue tube (discussed in detail later in this chapter). The victim should be extracted from the water as soon as possible and the appropriate emergency care should continue on the pool deck.



## Passive Victim Front Rescue

The front rescue can be an effective technique in any water depth. When performing the front rescue on a passive victim, the lifeguard will:

- Activate EAP.
- Lifeguard shall use either the front crawl or breaststroke with the rescue tube high and tight across the chest and under the armpits, to approach the victim.
- Lifeguard shall approach the face down victim from the top of the victim's head.
- Lifeguard shall reach his or her right arm to the victim's right wrist (or left arm to left wrist) and from the wrist, pull the victim toward you while turning the victim to a face up position. While completing this maneuver, use your opposite hand to push the rescue tube toward and under the victim's back.
- Lifeguard shall position both the victim's arms over the top of the rescue tube.
- Lifeguard shall open the victim's airway and check for breathing.
- If needed, the lifeguard shall provide 2 initial rescue breaths while the victim is still in the water and positioned on his or her back on the rescue tube (discussed in detail later in this chapter).
- The victim should be extracted from the water as soon as possible and appropriate emergency care should continue on the pool deck.



Figure CI0.19



Figure CI0.20



Figure CI0.21



Figure CI0.22



Figure CI0.23



Figure CI0.24

## Multiple Victim

This type of rescue involves 2 or more drowning victims at the same time. The victims could be any combination of passive, active or, simply, a distressed or tired swimmer.

The best response to multiple victims is to have at least one lifeguard for each victim enter the water. However, this is not always possible. When there are more victims than lifeguards to perform a rescue, the responding lifeguard(s), using the most appropriate entry and rescue technique for the circumstance, shall:

- Activate EAP.
- assist the victim who is in the most danger. In other words, the lifeguard will quickly assess and decide which of the victims needs attention first.
- perform rescue on the victim in greatest need.

If all victims are active, the lifeguard should:

- Secure the first victim and then swim, with the first victim, to the second victim.
- Assist the second victim in grabbing hold of the rescue tube. The second victim should be instructed to wrap his/her arms and legs around victim #1.
- Signal for back-up lifeguards to assist in bringing victims to the side of the pool

If one victim is passive, the lifeguard should:

- Lifeguard secures the passive victim on the rescue tube first.
- If victim is unresponsive, lifeguard checks for breathing and if not breathing, provides immediate rescue breathing.
- Signal for back-up lifeguards to assist in bringing passive victim to the side of the pool.
- If victim is responsive and/or is unresponsive but breathing, the lifeguard should secure the victim on the rescue tube; signal for back-up lifeguards; and swim to the next victim.



Figure CI0.25

## Submerged Victim Rescues

### Feet-First Surface Dive

#### Preparation:

- **Assess the Situation:** Quickly evaluate the scene and identify the location of the submerged victim.
- **Take a Deep Breath:** Inhale deeply to prepare for a longer underwater dive.

#### Positioning:

- Stand in a vertical position in the water with your feet together.
- Keep your arms at your sides or in a position to hold any rescue equipment.

#### Initiate the Dive:

- Push off the surface of the water using your legs to propel yourself downward.
- As you push off, extend your legs straight down to create a streamlined entry.

#### Entry:

- Enter the water feet-first, ensuring your body remains vertical.
- Point your toes to minimize resistance and reduce the splash upon entering.

**Submersion:**

- As you enter, allow your body to submerge briefly.
- Keep your feet together and your body aligned to maintain a streamlined position.

**Locate the Victim:**

- Once underwater, use your eyes to quickly locate the victim.
- If visibility is limited, use your hands to feel around you as you adjust your position.

**Rescue Technique:**

- Upon reaching the victim, assess their condition.
- Securely grasp them (e.g., under the arms or around the chest) to begin the rescue.
- If the victim is unconscious, ensure their head stays above water as you prepare to bring them to the surface.

**Return to Surface:**

- Swim upward while keeping the victim secure.
- Once you reach the surface, continue swimming towards safety or a designated exit point.



## Head-First Surface Dive

### Preparation:

- **Assess the Situation:** Quickly evaluate the surroundings and the condition of the victim if visible.
- **Take a Deep Breath:** Inhale deeply to maximize lung capacity and prepare for a longer dive.

### Positioning:

- Begin in a vertical position in the water, arms extended above your head.
- Ensure your legs are together and your body is straight.

### Initiate the Dive:

- Propel your body forward by pushing off the water with your legs while simultaneously extending your arms in front of you.
- Keep your head down and eyes focused on the target area (where you last saw the victim).

### Entry:

- Enter the water head-first, ensuring your body is streamlined to minimize resistance.
- Aim to keep your body as straight as possible during entry to enhance speed and efficiency.

### Submersion:

- As you enter the water, use the momentum to continue diving downward.
- Keep your eyes open and oriented toward the victim as you descend.

### Locate the Victim:

- Once submerged, quickly scan your surroundings to locate the victim.
- Use your arms and legs to adjust your position if necessary.

### Rescue Technique (for details please *Steps to Execute a Submerged Victim Rescue* in the next section):

- Upon reaching the victim, assess their condition.
- If they are unconscious or in need of assistance, securely grasp them (e.g., under the arms or around the chest) and prepare to bring them to the surface.
- Use a rescue technique appropriate to the situation, such as the rear approach or a tow.

### Return to Surface (for details please *Steps to Execute a Submerged Victim Rescue* in the next section):

- Ascend with the victim, keeping their head above water to ensure they can breathe.
- Once at the surface, continue the rescue by swimming toward safety or a designated exit point.



## Steps to Execute a Submerged Victim Rescue

- Activate EAP.
- Lifeguard approaches victim using either the front crawl or the breaststroke keeping the rescue tube high and tight across chest and under rescuer's armpits.
- Lifeguard should allow the rescue tube to float on the water's surface while continuing to wear the rescue tube strap as he or she approaches the victim's underwater position.
- Lifeguard shall perform either a feet-first or head-first dive to reach the victim in the water column or on the bottom of the pool.
- Lifeguard shall reach one arm under one of the victim's armpits from the rear so that the victim's back is flush against the lifeguard's chest and the lifeguard's arm is able to reach across the front of the victim's chest.
- Lifeguard may choose to push off the bottom with his or her feet and/or begin to kick to propel both victim and rescuer to the water's surface. This is likely unnecessary as the buoyancy of the rescue tube is enough to propel both victim and rescuer to the water's surface.
- Lifeguard shall simultaneously begin to reach for the rescue tube tow line with the hand of his or her free arm. Once the tow line is in hand, the rescuer should begin to feed the tow line to his or her hand that is across the victim's chest.
- Lifeguard shall slide the rescue tube between the victim's back just below his or her shoulder line and the lifeguard's chest.
- Lifeguard shall lean the victim back on the tube (just as was done for a passive victim at the water's surface).
- Lifeguard shall open and maintain an airway and provide in-water ventilations (discussed in detail later in the chapter) if necessary.



Figure C10.26



Figure C10.27

## In-Water Ventilations

There are times when a lifeguard encounters an unresponsive passive victim who is not breathing. In these cases, it is crucial to ventilate as soon as possible. If the lifeguard is not able to recognize and extract this victim within seconds, ventilations must be provided while in the water.

In-water ventilations can be provided while the passive unresponsive victim is on the rescue tube. Additionally, if the lifeguard places the victim on a backboard, ventilations can also be provided once the victim is fully immobilized on the board.

To provide ventilations to a victim in the water, the lifeguard should:

- Ensure the rescue tube is against the victim's back just below his or her shoulder line and under his or her armpits with arms draped over the tube (Figure C10.28).
- Position him or herself at the top of the victim's head with CPR pocket mask to ensure the airway is open to initiate ventilations.

Ventilations in the water can also be provided to a spinal trauma victim in much the same way as described above (See Figure CI0.29). Once the victim is 'packaged' on the backboard and, at least one rescue tube, is perpendicular under the backboard, the lifeguard should position him or herself on the side of the backboard with a CPR pocket mask to ensure an open airway and to initiate ventilations.



Figure CI0.28



Figure CI0.29

## Escapes

An active victim's only objective is survival. The victim will do anything to keep his or her head above water and breath. This includes grabbing for and latching onto any stationary object and/or person in the water. This includes the rescuing lifeguard.

A lifeguard cannot allow the victim to grab him or her and possibly becoming a victim him or herself. Hence, it is standard practice for rescuing lifeguards to approach an active victim from the rear as to limit the victim's ability to grab hold of the lifeguard.

There will be times, no matter the precautions a lifeguard takes, that he or she will be grabbed and possibly held underwater by a panicked active drowning victim. In these cases, it is vital that the lifeguard be very well versed in performing both rear and front victim hold escape maneuvers.

Anytime a lifeguard is grabbed by a victim, his or her initial reaction and first action must be immediate. If not wearing a rescue tube, the lifeguard should:

1. Tuck his or her chin against his or her chest.
2. Submerge him or herself in the water by pushing up with both hands and arms as many times as is needed to submerge. The victim will likely release his or her hold in an effort to return to the water's surface.
3. Return to the surface and re-approach the victim from the rear and execute a rear rescue by placing one arm over the top of the victim's shoulder, across the victim's chest and under the opposite armpit. Use a side stroke to move the victim to safety.

If wearing a rescue tube, the lifeguard should:

1. Tuck his or her chin against his or her chest.
2. Forcefully push up on the victim's elbows to break the victim's hold.
3. Submerge him or herself.
4. Return to the surface and re-approach the victim from the rear and execute a rear rescue by placing one arm over the top of the victim's shoulder, across the victim's chest and under the opposite armpit. Use a side stroke to move the victim to safety.

1



2



3



4



5



6



## Extraction From the Water

- **Assisted Walk** – one or more lifeguards place one arm around the waist of the conscious victim while being removed from the water and drapes one of the victim’s arms around the lifeguard’s neck and over his/her shoulder. The lifeguard(s) carries the rescue tube in his/her other hand and escort victim to the deck. This is used in zero-depth environments.
- **Chair Carry** – two lifeguards facing one another, interlock arms by holding one another’s wrists – right arms to left arms, respectively. The two forward most arms scoop the victim under his/her knees and the two rear most arms support the victim’s back. The victim’s left arm is draped around one lifeguard’s neck while the victim’s right arm is draped around the other lifeguard’s neck. This is used in zero-depth environments.
- **Backboard Quick Extract:**
  - Primary rescuer swims the victim to the pool’s edge.
  - Secondary rescuer(s) prepares the backboard by removing the headgear and unbuckling the straps.
  - Secondary rescuer(s) slide the backboard into the pool keeping the backboard rails against the pool wall.
  - Primary rescuer guides the victim, back first, against the backboard while simultaneously handing one of the victim’s wrists to the secondary rescuer on the pool deck.
  - Secondary rescuer(s) simultaneously grasps the victim’s wrist and pulls the victim up onto the backboard.
  - Secondary rescuer(s) will, while holding the victim’s wrist, pull the backboard out of the water sliding the rails across the pool’s edge.
  - Primary rescuer assists with removing the victim from the pool by lifting and pushing the backboard from the feet.



Figure CI0.30



Figure CI0.31

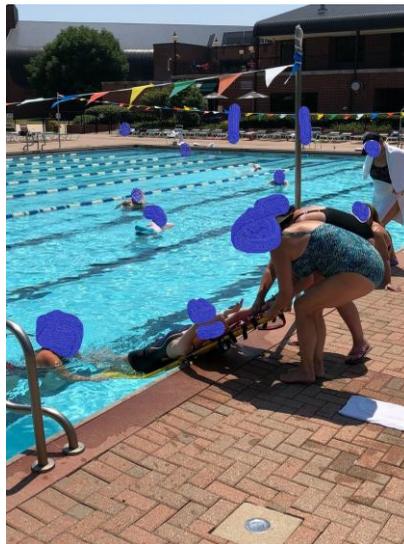


Figure CI0.32

## One Lifeguard is Available

- Lifeguard swims the victim to the pool's edge with the victim facing the pool wall.
- Lifeguard shall place one of the victim's hands on top of the pool's edge and place the victim's second hand on top of the first hand.
- Lifeguard shall place the victim's forehead on top of his or her hands.
- Lifeguard shall firmly place his or her hand closest to the victim on the victim's hands and wrists, temporarily securing the victim's position.
- Lifeguard shall use his or her 'free' hand to assist in exiting the pool.
- Lifeguard shall use one of two methods to extract the victim from the pool:
  - 1.) Enlist the assistance of a bystander to fetch the backboard. The bystander and lifeguard utilize the same procedure as described in the previous section).
  - 2.) Lifeguard shall, once on the pool deck and using his or her 'free' hand, grasps the victim by the swimsuit. Lifeguard shall: pull the victim's lower body onto the pool deck; protect the victim's head while pulling lower body onto the deck; log roll the victim fully onto the pool deck.

### Chapter Ten Recap

- 1.) Explain how to effectively execute both a Tossing Assist and a Reaching Assist.

- 2.) What is the difference between an active victim and a passive victim?

- 3.) Unless the lifeguard knows for sure that a passive victim is not suffering from spinal trauma, the victim must be treated as if he or she is a spinal trauma victim.
  - a.) True
  - b.) False

- 4.) Detail the key components of a rear active victim rescue:

# Spinal Trauma – Chapter II

## Recognizing Signs & Symptoms

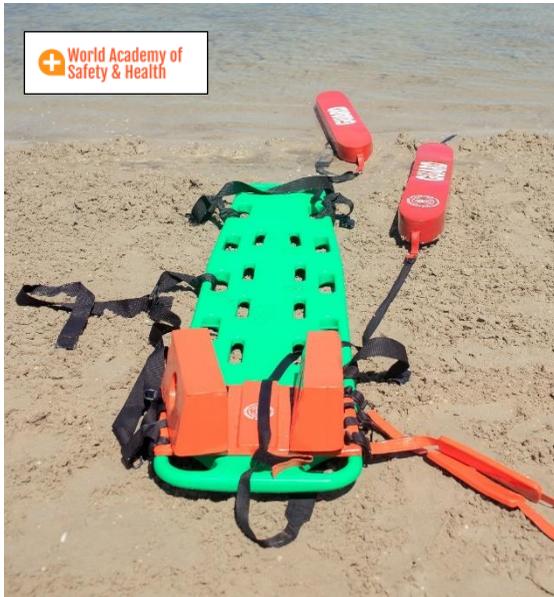


Figure CII.1

Spinal Trauma should be suspected in any of the following circumstances:

- Pain in Head, Neck and/or Back
- Fluids Exiting Nose, Mouth, Ears or Eyes
- Numbness and/or Weakness
- Altered State of Consciousness
- Imbalance on Their Feet

## Stabilization of Spinal Trauma

Effectively managing a victim of a spinal injury can be scary. It is important that the lifeguard remember that so long as the victim has a pulse, is breathing, and is not suffering any additional immediately life-threatening injuries, lifeguards and other rescuers should take their time to ensure there are no sudden or erratic movements of the victim and that inline stabilization is constantly maintained.

Citing the latest research, many medical professionals, EMS services, Medical Directors and others in both the medical profession and emergency services now suggest not backboarding a victim when spinal trauma is suspected.

*Recent evidence regarding spinal immobilization with backboards has shown limitations to their usefulness in preventing neurologic injury, and several papers have demonstrated harm in the form of more frequent pressure ulcers, decreased pulmonary function, and greater pain for patients 1-4. Because of these findings, many EMS protocols have shifted away from routine use of backboards for anything other than extrication. While this change is progressive and shows a reasonable response to the literature, it took decades to occur. The evidence against cervical collar use is similarly mounting, yet there is little sign that practice recommendations are changing 10.*

When it comes to splinting an injury, lifeguards are taught not to splint unless the victim must be moved. This is exactly how we should approach the idea of backboarding here. And, that a victim should only be moved if leaving them in their current position would cause further harm as they await EMS arrival.

Victims of spinal trauma should be treated in a similar way – backboarding of a victim with suspected spinal trauma should only be done if and when local EMS protocol dictates it. Aquatic facilities must coordinate with their local EMS for guidance.

Backboarding a victim does not come without inherent risk of causing more harm, paralysis or even death. If treatment of victims of spinal trauma is approached from a benefit analysis point of view, according to the National Association of EMS Physicians and American College of Surgeons Committee on Trauma,

*Long backboards are commonly used to attempt to provide rigid spinal immobilization among emergency medical services (EMS) trauma patients. However, the benefit of long backboards is largely unproven.*

The long backboard can induce pain, patient agitation, and respiratory compromise. Further, the backboard can decrease tissue perfusion at pressure points, leading to the development of pressure ulcers. Utilization of backboards for spinal immobilization during transport should be judicious so that the potential benefits outweigh the risks <sup>18</sup>.

- Appropriate patients to be immobilized with a backboard may include those with:
  - Blunt trauma and altered level of consciousness
  - Spinal pain or tenderness
  - Neurologic complaint (e.g., numbness or motor weakness)
  - Anatomic deformity of the spine
  - High-energy mechanism of injury and any of the following:
    - Drug or alcohol intoxication
    - Inability to communicate
    - Distracting injury

Patients for whom immobilization on a backboard is not necessary to include those with all of the following:

- Normal level of consciousness (Glasgow Coma Score [GCS] 15)
- No spine tenderness or anatomic abnormality
- No neurologic findings or complaints
- No distracting injury
- No intoxication <sup>18</sup>

**BOTTOM LINE:**

- There is no high-level evidence that prehospital spinal immobilization positively impacts patient-oriented outcomes
  - Spinal Immobilization Does NOT Help Immobilize the Cervical Spine
  - Spinal Immobilization Does NOT Decrease Rates of Spinal Cord Injury
  - Spinal Immobilization Increases the Difficulty of Airway Management
  - Spinal Immobilization Can Cause Pressure Ulcers
  - Spinal Immobilization Changes the Physical Exam
  - Spinal Immobilization Worsens Pulmonary Function
  - Spinal Immobilization Increases Intracranial Pressure
- There is no evidence that immobilizing awake, alert patients without deficits/complaints provides benefit
- Selective spinal immobilization protocols can help identify patients at low risk for injury and avoid immobilization <sup>18</sup>.

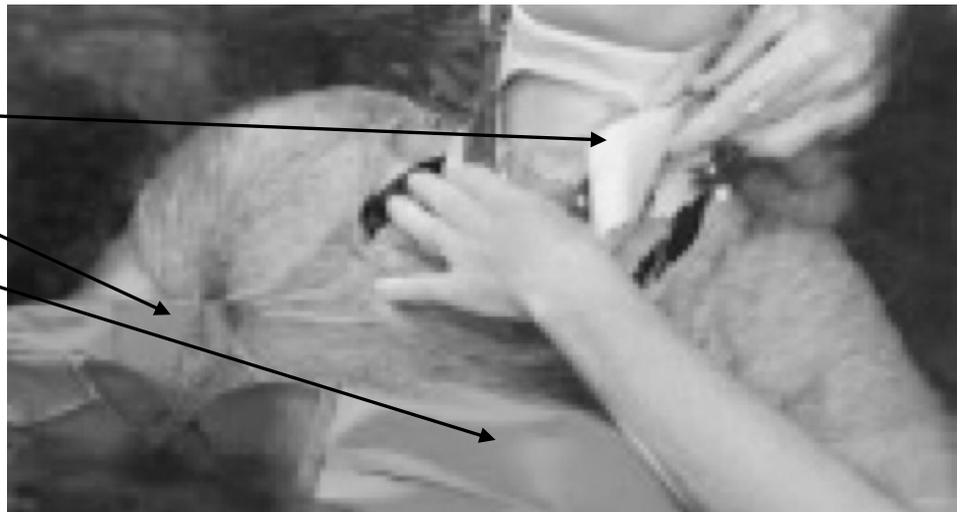
**Do we backboard? Do we use a C-collar? Do we only use manual inline stabilization?**

- Always use manual inline stabilization both in-water and on land for any suspected spinal.
- Only backboard a victim of suspected spinal trauma when required by local medical direction.
- Participate in additional in-service training using the equipment, facility, local protocols and facility protocols for spinal trauma victims.

Application of C-Collar to an in-water victim suffering an apparent spinal trauma injury.

Rescue tube can also be seen clipped around the victim under his/her armpits.

FIGURE C.11.2



# Manual Inline Stabilization

## Head-Chin-Chest Grip



Figure CII.3



Figure CII.4

This technique is most easily performed in water in which the lifeguard can stand-up. However, it may also be used in deep water with a few adjustments to the technique.

Activate the EAP and approach the facedown spinal trauma victim using breaststroke with the rescue tube high and tight across your chest. From here the lifeguard can choose between two different techniques to perform the Head-Chin-Chest Grip:

- Remove the rescue tube. Approach the facedown victim from the side. While treading water with your legs, place one arm on top of and straight down the victim's back (be sure to be situated close enough to the victim to allow your arm to be completely straight and not angled down the victim's back). Place your hand behind the victim's ears and grip the occipital bones.

Place your other arm under the victim's arm that is closest to you. Next, place your arm straight down the center of the victim's chest (again, be sure to be situated close enough to the victim to allow your arm to be completely straight and not angled down the victim's chest). Place your hand on the lower mandible of the victim – being careful not to cover the airway or place your hand on the throat of the victim.

Your hand should be firmly gripping the victim's lower mandible and occipital bones as to not allow movement of the head or neck. Additionally, your arm should be applying equal pressure to the victim's chest and back as to not allow movement of the victim's spine/back.

While maintaining the Head-Chin-Chest Grip described above, swim underneath the victim coming up on the opposite side of the victim. This will allow the victim to also be turned face-up and on his or her back in the water.

If being performed in deep water, this technique should only be used by lifeguards who are highly proficient swimmers and are able to tread water for minutes, using only their legs, while performing the technique and keeping both his or her head and the victim's head above water until back-up arrives to assist.

- Keeping the rescue tube on and high and tight across your chest, approach the victim from the rear. Remove the rescue tube. Approach the facedown victim from the side. While using the rescue tube to float you, place your arm closest to the victim on top of and straight down the victim's back (be sure to be situated close enough to the victim to allow your arm to be completely straight and not angled down the victim's back). Place your hand behind the victim's ears and grip the occipital bones.

Place your other arm under the victim's arm that is closest to you. Next, place your arm straight down the center of the victim's chest (again, be sure to be situated close enough to the victim to allow your arm to be completely straight and not angled down the victim's chest). Place your hand on the lower mandible of the victim – being careful not to cover the airway or place your hand on the throat of the victim.

Your hands should be firmly gripping the victim's lower mandible and occipital bones as to not allow movement of the head or neck. Additionally, your arms should be applying equal pressure to the victim's chest and back as to not allow movement of the victim's spine/back.

While maintaining the Head-Chin-Chest Grip described above, roll the victim to the face-up position in the water.



Figure C11.5



Figure C11.6



# Arm Splints

To effectively perform this skill, the lifeguard should:

- Activate the EAP.
- Approach the victim by either using the breaststroke or walking being careful to limit any disturbance in the water.
- Align hip closest to the victim near the victim's hip.
- Use arm closest to the victim to grasp the victim's outer arm farthest from the lifeguard near the bicep while simultaneously using arm farthest from the victim to grasp the victim's outer arm closest to the lifeguard near the bicep.
- Simultaneously move the victim's arms up alongside the victim's head so that the victim's biceps are against the victim's ears (**FIGURE C.II.7**).
- Apply pressure to both of the victim's arms so that the head and neck are immobilized. This pressure should be firm and evenly distributed on both sides of the victim's head.
- Slowly and smoothly walk around the pool in the direction the victim's head is pointing as you perform this entire skill and after the victim is rolled to the face-up position (**FIGURE C.II.8**).

This will help the victim's lower body to remain buoyant and float near the water's surface which will keep the victim's entire body more streamlined.



Figure C.II.7



Figure C.II.8



Figure C.II.9



Figure C.II.10



Figure C.II.11



Figure C.II.12



Figure C.II.13

## Backboarding Spinal Trauma Victims

The following are a generalized set of procedures for backboarding. They are designed to provide a broad understanding of the goals of backboarding in various situations and environments. Each facility's design, protocols, and techniques are different and local medical direction and EMS protocols may differ from one jurisdiction to another. For these reasons, it is vital for a lifeguard to receive additional in-service training from his or her employer based upon the employer's specific procedure and technique(s) as well as the local medical direction and local EMS protocols.

The overall goal of backboarding an in-water victim of spinal trauma is the ability to extract this person from the pool without causing additional injury. There are many techniques used to effectively backboard a victim. All techniques are based upon the same set of principles and the specific detailed steps are dependent upon the circumstance:

- Maintaining inline stabilization of the head, neck and back of the victim.
- Backboard is placed underneath the victim and raised up to the victim.
- One or more backboard straps, headgear pillows and head strap(s) are utilized.
- Extraction from the pool in a safe and effective manner.

The most desirable circumstance is having at least four trained rescuers available when handling a situation in which a spinal trauma victim must be backboarded.

## Seated Stable Carry

This spinal injury management technique was originally developed for use at surf beaches. It is most easily used in water no deeper than the lifeguard's waist <sup>5</sup>.

To effectively perform this skill, the lifeguard should:

- activate the EAP.
- approach the victim by either using the breaststroke or walking being careful to limit any disturbance in the water.
- approach the victim from behind.
- place arm closest to the victim under the victim's armpit farthest from the lifeguard.
- place arm farthest from the victim under the victim's armpit closest to the lifeguard.
- arms should be far enough under the victim's armpits to allow the palms of the lifeguard's hands to reach the victim's ears to provide manual inline stabilization.
- once the lifeguard's arms are fully under the victim's armpits and the lifeguard's hands are providing manual inline stabilization, lifeguard should lift the victim up so that his or her back is flush against the lifeguard's chest.
- while facing the victim, a second rescuer picks up both legs of the victim from behind the knees and pushes the victim against the first rescuer's back as the first rescuer walks the victim out of the water.

This technique is also easily used with a spinal trauma victim on land who is seated, standing, or laying in a prone position.



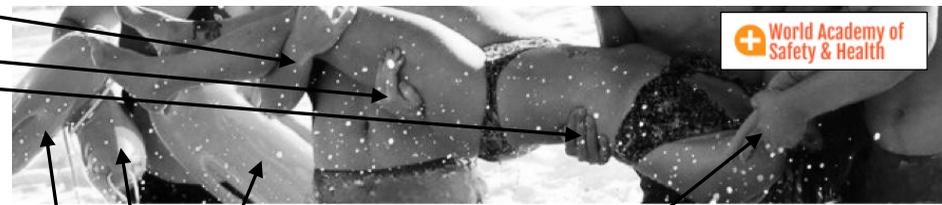
Figure CII.14



Figure CII.15

When additional lifeguards are available, each of the back-up lifeguards should place his/her hands under the back, legs, and waist of the suspected spinal trauma victim. This will help to provide support and stabilization to the spinal column.

FIGURE C.11.16



One lifeguard maintains control of the rescue tubes of all other rescuing lifeguards.

Primary lifeguard provides inline stabilization.

## Standing Backboarding

Standing backboarding or what is often referred to as a “standing takedown” is used when a person exhibits the signs of spinal trauma while on land. Or, it is used when a person complains of the symptoms of spinal trauma while on land and standing<sup>5</sup>. According to the United States Lifesaving Association (USLA), this technique should only be used when necessary and the victim is not able to be safely moved into a sitting position or a supine position. Further, it is recommended that the victim have a cervical collar applied prior to moving to provide additional support of the neck<sup>5</sup>.

The steps for backboarding a victim who is in the standing position are:

- 1.) lifeguard provides manual inline stabilization by placing the palms of his/her hands on the victim's ears while facing the victim.
- 2.) back-up lifeguard will apply the proper size c-collar while standing behind the victim.
- 3.) a back-up lifeguard will place the spineboard behind the victim.
- 4.) Two lifeguards will maintain manual inline stabilization while in front of the victim by each placing the palm of his/her hand closest to the victim on the victim's ear. These lifeguards will place his/her other hand under the victim's armpit and grasp a handle of the backboard.
- 5.) a third back-up lifeguard will grasp the top of the backboard with two hands from behind the victim to assist in guiding the board with the victim to the ground while the other two lifeguards maintain manual inline stabilization and contact with the backboard handles.

Vertical backboarding on land of a victim of suspected spinal trauma – often referred to as a 'standing takedown'.

FIGURE C.6.13



## Zero Depth Backboarding

The zero depth backboarding procedures are used in two different circumstances. If a person exhibits the signs of or complains of the symptoms of spinal trauma while on land and is on the ground. Or, if a person exhibits the signs of spinal trauma while in shallow water – a few inches to only wet ground. If the victim’s airway, while on his/her back, is out and remains out of the water then the water is shallow enough to utilize the zero depth backboarding procedures.

The procedure for zero depth backboarding are:

- 1.) primary lifeguard (lifeguard #1) provides manual inline stabilization using the Arm Splints technique from the top of a face-up victim and while standing on one side of a face-down victim. If the victim is face-down, the lifeguard must roll the victim the face-up position once secure in the Arm Splints.
- 2.) if victim is unresponsive, lifeguard checks for breathing and if not breathing, provides immediate rescue breathing.
- 3.) if victim is responsive or unresponsive but breathing, lifeguard #1 maintains inline stabilization.
- 4.) first back-up lifeguard (lifeguard #2) takes over manual inline stabilization from the one side of the victim’s head by placing his/her palms over the ears of the victim.
- 5.) Lifeguard #1 moves victim’s arms to the sides of the body and secures a c-collar on the victim.
- 6.) lifeguard #1 places the arm of the victim on the side he/she will be rolled.
- 7.) lifeguard #1 grasps the victim at the hip area and ribcage area.
- 8.) second back-up lifeguard (lifeguard #3) retrieves a backboard.
- 9.) lifeguard #2 signals lifeguard #1 to roll the victim toward him/herself and lifeguard #3 to slide the backboard under the victim from the opposite side of lifeguard #1.
- 10.) lifeguard #2 signals lifeguard #1 and lifeguard #3 to roll the victim onto the backboard.
- 11.) lifeguard #3 retrieves backboard headgear while lifeguard #1 secures the straps from the chest to the feet of the victim (ensuring that the chest strap is secured under the victim’s armpits and the waist strap is over top of the victim’s hands/arms).
- 12.) lifeguard #3 assists lifeguard #2 in securing the headgear and head straps. The top head strap goes across the victim’s forehead and if the backboard headgear has a second strap it goes on top of the c-collar near the victim’s chin.

## Prevention of Spinal Trauma & Diving Depths

Understanding allowable diving depths is crucial for ensuring safety during training and in real-life rescue scenarios. The specific depths can vary based on the type of dive, the facility's policies, and safety guidelines. Here’s an overview of typical allowable diving depths in a pool setting.

### Allowable Diving Depths

#### 1. Shallow Water Diving:

- **Depth:** Typically, shallow water is defined as being less than 5 feet (1.5 meters) deep.
- **Allowable Dives:** Feet-first entries are generally permitted, as these minimize the risk of injury. Head-first dives should never be permitted in shallow water to prevent potential head or neck injuries.

#### 2. Standard Surface Diving Depth:

- **Depth:** Standard diving depths for head-first surface dives usually range from 5 to 12 feet (1.5 to 3.7 meters).
- **Allowable Dives:** Both head-first and feet-first surface dives can be performed in this range, as there is adequate water depth to ensure safety.

#### 3. Deep Water Diving:

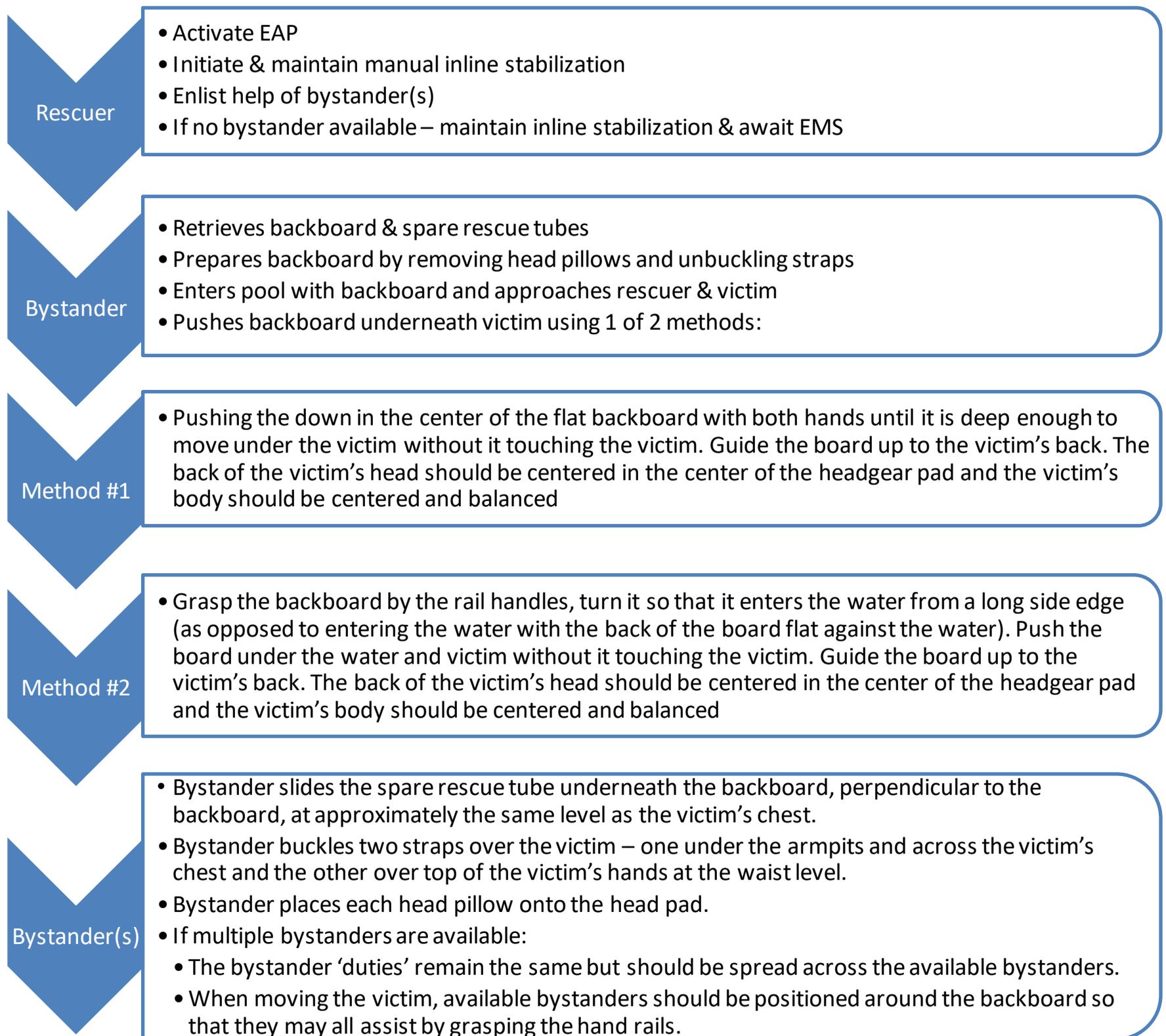
- **Depth:** Deep water is typically defined as being more than 12 feet (3.7 meters) deep.
- **Allowable Dives:** In deep water, lifeguards can safely perform both head-first and feet-first dives. The depth allows for a safe descent without the risk of hitting the bottom.

### Factors Affecting Diving Depths & Safety Considerations

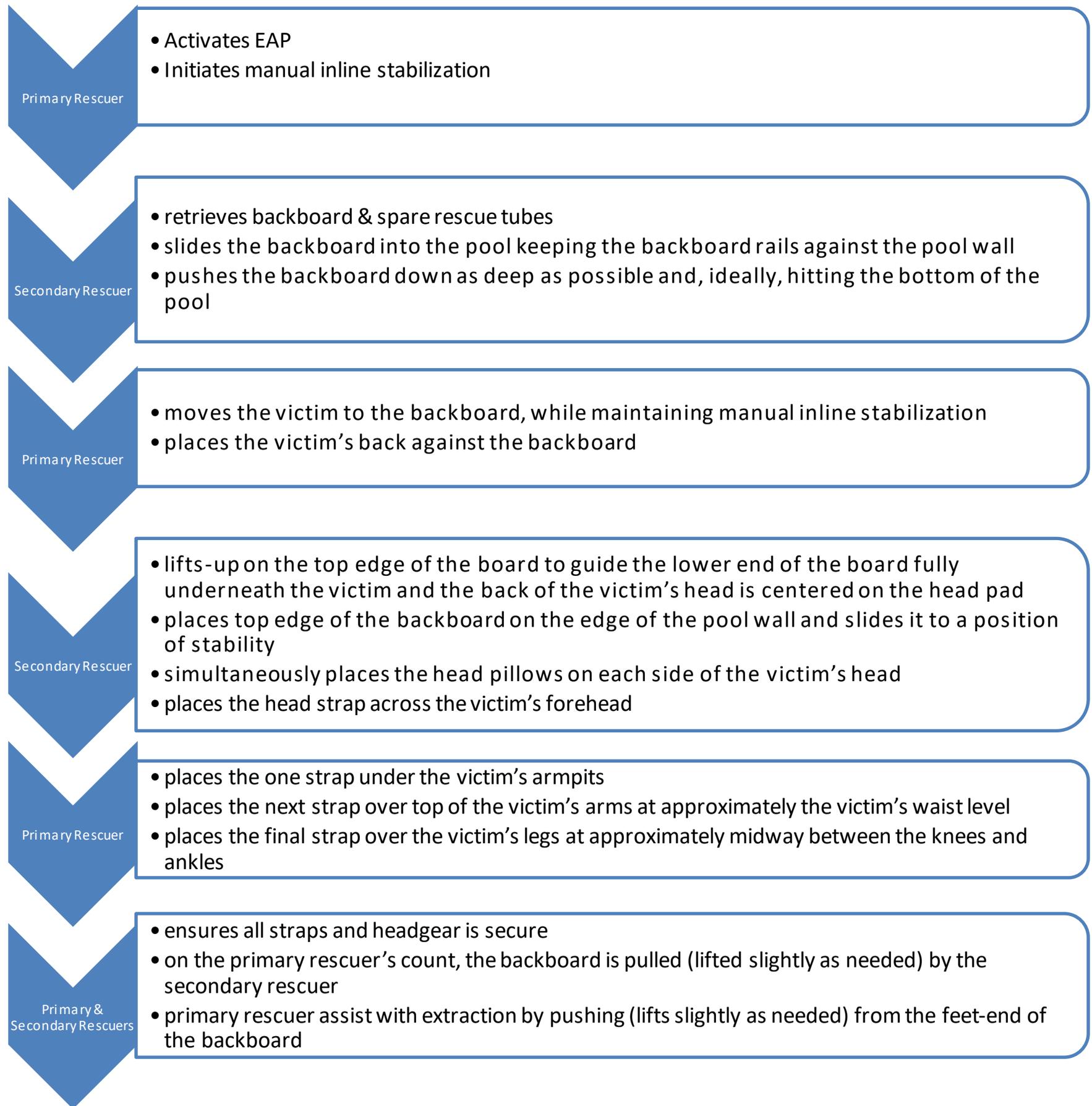
1. **Type of Dive:** The technique being used (e.g., head-first vs. feet-first) will influence the allowable diving depth. Head-first dives require deeper water to avoid injury.
2. **Pool Design:** Different pools have varying depths, and specific sections may be designated for diving. It’s important to be aware of these areas.
3. **Facility Rules:** Each facility may have its own guidelines regarding diving depths, so it’s crucial to familiarize yourself with the specific rules of the pool where training is taking place.
4. **Pre-Dive Assessment:** Always assess the water depth and surrounding environment before performing any dive.
5. **Clear Area:** Ensure that the area is clear of other individuals or obstacles to prevent collisions.

# In-Water Backboarding

## One Rescuer



## Two Rescuers



Secondary Rescuer

- slides the backboard into the pool keeping the backboard rails against the pool wall
- pushes the backboard down as deep as possible and, ideally, hitting the bottom of the pool

Primary Rescuer

- moves the victim to the backboard, while maintaining manual inline stabilization
- places the victim's back against the backboard

Secondary Rescuer

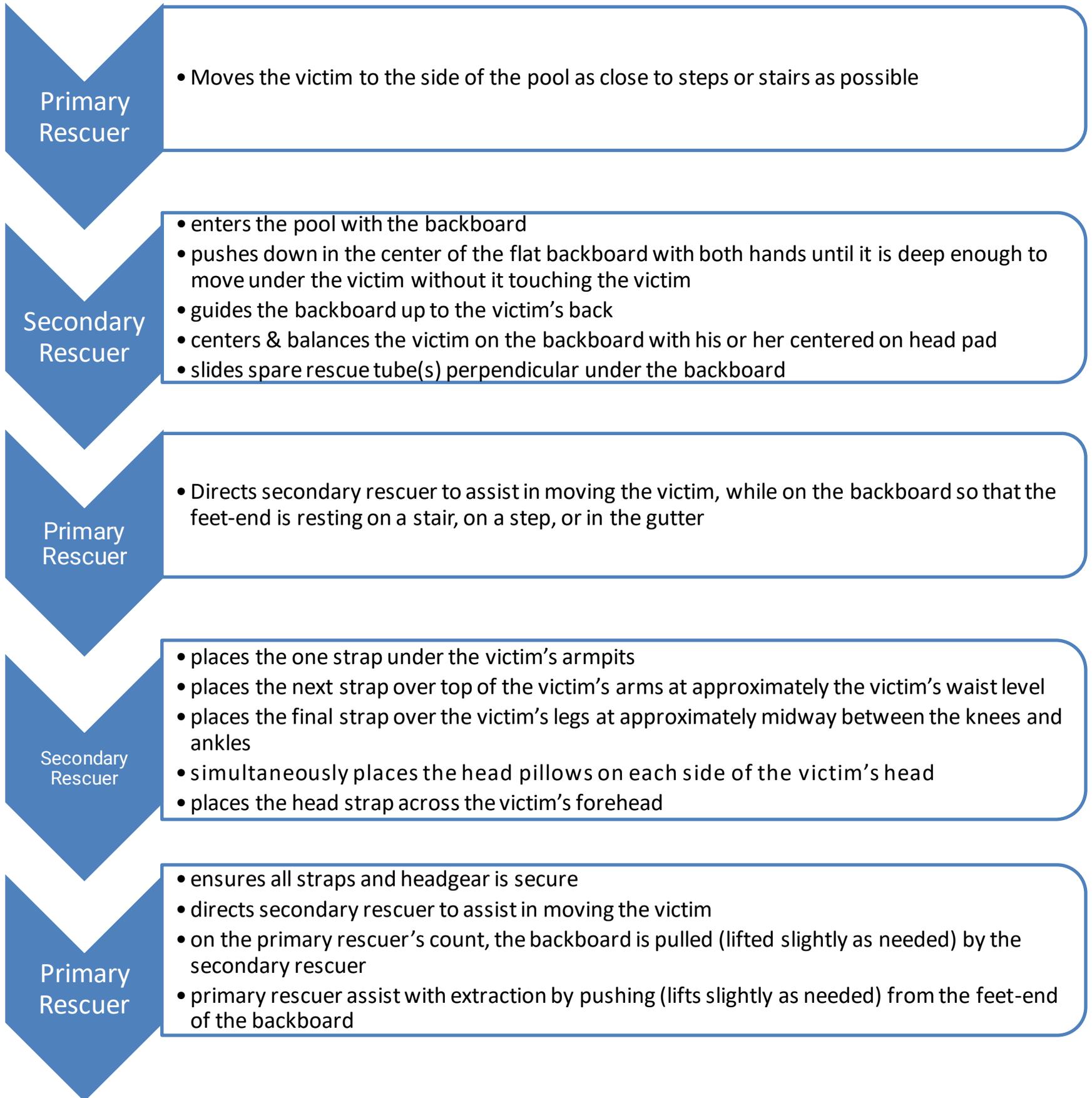
- lifts-up on the top edge of the board to guide the lower end of the board fully underneath the victim and the back of the victim's head is centered on the head pad
- places top edge of the backboard on the edge of the pool wall and slides it to a position of stability
- simultaneously places the head pillows on each side of the victim's head
- places the head strap across the victim's forehead

Primary Rescuer

- places the one strap under the victim's armpits
- places the next strap over top of the victim's arms at approximately the victim's waist level
- places the final strap over the victim's legs at approximately midway between the knees and ankles

Primary &  
Secondary Rescuers

- ensures all straps and headgear is secure
- on the primary rescuer's count, the backboard is pulled (lifted slightly as needed) by the secondary rescuer
- primary rescuer assist with extraction by pushing (lifts slightly as needed) from the feet-end of the backboard



### Three or More Rescuers – Option #3

Primary Rescuer

- Moves the victim to the side of the pool as close to steps or stairs as possible

Secondary Rescuer

- enters the pool with the backboard
- turn the backboard so that it enters the water from a long side edge (as opposed to entering the water with the back of the board flat against the water).
- guides the backboard up to the victim's back
- centers & balances the victim on the backboard with his or her centered on head pad
- slides spare rescue tube(s) perpendicular under the backboard

Primary Rescuer

- Directs secondary rescuer to assist in moving the victim, while on the backboard so that the feet-end is resting on a stair, on a step, or in the gutter

Secondary Rescuer

- places the one strap under the victim's armpits
- places the next strap over top of the victim's arms at approximately the victim's waist level
- places the final strap over the victim's legs at approximately midway between the knees and ankles
- simultaneously places the head pillows on each side of the victim's head
- places the head strap across the victim's forehead

Primary Rescuer

- ensures all straps and headgear is secure
- directs secondary rescuer to assist in moving the victim
- on the primary rescuer's count, the backboard is pulled (lifted slightly as needed) by the secondary rescuer
- primary rescuer assist with extraction by pushing (lifts slightly as needed) from the feet-end of the backboard

## Chapter Eleven Recap

1. Signs and symptoms of spinal trauma might include:
  - a.) Altered state of consciousness
  - b.) Fluids exiting the mouth, nose, ear, and/or eyes
  - c.) Neither a or b is correct
  - d.) Both a and b
  
2. Aquatic facilities must consult and coordinate with their local EMS for guidance on treating victims of spinal trauma.
  - a.) True
  - b.) False
  
3. The Head-Chin-Chest Grip and the Arm Splints are two viable techniques to immobilize the victim of suspected spinal trauma in the water.
  - a.) True
  - b.) False
  
4. When using the Arm Splints technique in shallow water, why is it important for the lifeguard to slowly, gently, and while maintaining inline stabilization to walk the victim around the pool while awaiting the backboard?

# ASHI (an HSI company) Basic First Aid – Chapter I2 & ASHI (an HSI company) Basic Life Support (BLS) – Chapter I3

Chapters twelve (I2) and thirteen (I3) are to be delivered as a separate ASHI course - Basic Life Support (BLS)/First Aid. All WASH instructors must hold a valid ASHI Instructor certificate at the BLS level. Successful completion of the ASHI Basic Life Support (BLS)/First course leads to an ASHI BLS/First Aid certificate which will remain valid for a period of one (I) year and the Basic First Aid certificate will remain valid for two (2) years from the date listed on the certificate.

All ASHI manuals, ancillary materials and resources for their BLS/First Aid must be referenced and utilized according to the ASHI guidelines.

# *In-Service Training – Chapter 14*

**OBJECTIVE(S):** 1. Explain the need for continuing practice to keep skills sharp; 2. Explain the need for regular in-service training.

## **In-Service Training**

It is not enough for lifeguards to complete a Certification or recertification course every 1-2 years. Lifeguards must be engaged in ongoing professional development and in-service training at the aquatic facility for which he/she will be providing lifeguard coverage.

Regular and routine in-service training ensures the lifeguard(s) are physically and mentally prepared to properly respond during an emergency.

In-service training topics should be varied and should also address facility-specific concerns. Above all, the rescue skills of lifeguards must remain sharp.

In-service must address, at minimum, the following:

- Learning & practicing the EAP
- Facility rules and regulations
- Preventative lifeguarding techniques
- Refreshing of skills learned in the lifeguard/CPR/AED/1st Aid Certification Course
- Overall risk management
- Facility documentation & administrative procedures
- Review of local, state, and federal requirements of lifeguards
- Industry standards for lifeguards, staff, and aquatic facilities

Lifeguards must be held accountable for keeping their lifesaving skills sharp and in good form - one never knows when they will be needed.

Lifeguards should attend regular in-service trainings for continuous improvement.

# Special Scenarios – Chapter 15

**OBJECTIVE(S):** 1. Identify limitations of one lifeguard facilities; 2. Identify physical skills that require adapting if working at one lifeguard facilities; 3. Explain how to adapt physical skills at one lifeguard facilities to be able to provide effective emergency care; 4. Identify the unique challenges presented by specific facility features; 5. Explain how to provide emergency care when dealing with specific facility features.

## Facilities with One Lifeguard

It is vital for a lifeguard who may find him or herself working alone at a pool or facility to know how to effectively handle an emergency in the absence of trained back-up coverage. Throughout this manual and the WASH lifeguard certification program, there are skills and content knowledge included that address one lifeguard scenarios. General ‘rules of thumb’ for lifeguards who are working alone include:

- Always activate the EAP prior to responding to an emergency
- Enlist the help of bystanders when available
- If possible, stabilize the victim and await arrival of EMS

## Facilities with Special Features

- Splash Pad
- Diving Board
- Slide
- Lazy River
- Log Roll

Special features must be inspected on a daily basis to ensure they are properly functioning and pose no risk to patrons because of operational issues or concerns. Any feature that is not functioning as it is designed and/or has other maintenance related issues should immediately be closed to the patrons. It should not be reopened until and unless the necessary repairs have been completed and inspected. Lifeguards must also remain vigilant during operational hours and report any malfunction; perceived malfunction; loose, broken, missing, or worn pieces or equipment; unusual noises or change in the manner in which the feature is operating including power surges or outages and water delivery or flow issues.

The facility should have safety checklist that is specific to each water or special feature on the property. These checklists must be completed each time the feature is inspected. They should be signed and dated by the person completing the inspection and kept on file in the management office. Of course, any issues should be immediately reported to management and the feature closed to patrons.

Additional attention should be given to how best to position lifeguard staff at the special features. At minimum, there should be at least one lifeguard at the top and the bottom of any slide feature; lifeguards are strategically placed along the entire path of any lazy river type feature; at least one lifeguard in the deep portion and at least lifeguard in the shallow portion of any feature of multiple depths; there are no blind spots in coverage areas; back-up coverage is easily attained.

Generally speaking, when considering the positioning of lifeguards, the aquatics management staff must ensure:

- At least one lifeguard with immediate and easy access to the emergency shut-off button for each special feature
- No portion the water in any of the special features is left unguarded and there are no blind spots in the water
- All lifeguards working the same special feature have a reliable and effective method of communication with one another in addition to whistle signals. Ideally, all lifeguards in the facility share the same method of communication and have the ability to communicate with any and all other staff at the facility.

## Missing Person/Child

Any time the lifeguard(s) is notified a person missing, he/she should:

- Obtain the name and complete description – including age, gender, hair color, eye color, clothing description.
- Find out the person's last known location.
- Find out if the missing person was engaged in an activity on the pool deck/beach; was last seen in the water; if the missing person was walking in a particular direction. It is IMPORTANT to note: statistically speaking, missing children and elderly will walk with the wind along the shoreline.
- Find out if the missing person has any medical conditions.
- Obtain any other information that may be helpful in locating the missing person.
- Contact dispatcher with the above information so the dispatcher can alert other lifeguard(s). If there is no dispatcher, alert nearby businesses and utilize any type of communication and/or public address system to alert the public on or around the beach.
- Instruct the family of the missing person to remain in one location so that the lifeguard(s) can easily and quickly make contact as and when needed.
- If the missing person was last seen in the water, lifeguard(s) must immediately assess and investigate to determine if a water search should be conducted.
- Notify the dispatcher when the missing person is located.

Any time a missing child is brought to a lifeguard, the lifeguard(s) should:

- Notify the dispatcher of the missing child being sure to share a complete description – the dispatcher will alert other lifeguard(s).
- If lifeguard does not immediately locate the parents, the missing child should be kept with the lifeguard. It may be useful to use one long whistle blast to gain attention of swimmers and beachgoers and point out the missing child.
- If, after the above public notification, the parents are not located, the child should be taken to the next lifeguard station and the procedure repeated.
- Ensure that the child is comforted and his/her emotional well-being is preserved during the process.
- If this procedure is unsuccessful in locating the parents, the child should be transferred to the local authorities for their assistance in locating the parents.
- At no time during the process, should any lifeguard leave his/her area unguarded.

## Chapter Fifteen Recap

- I.) Lifeguards should utilize bystanders during an emergency at one lifeguard facilities.
  - a.) True
  - b.) False
  
- 2.) When using bystander assistance, the lifeguard must provide verbal instructions to the bystander for each sequence of care provided before providing it.
  - a.) True
  - b.) False

# Appendix A – Resources & Links

Name(s) of Witnesses: \_\_\_\_\_

Permanent Address of Witness: \_\_\_\_\_

Present Address of Witness: \_\_\_\_\_

Home Phone: \_\_\_\_\_ Cell Phone: \_\_\_\_\_

Was Witness Statement Obtained? Yes \_\_\_\_\_ No \_\_\_\_\_

Was First Aid or Other Medical Treatment Rendered? Yes \_\_\_\_\_ No \_\_\_\_\_

If yes, please describe treatment: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

Name of Person Rendering Medical Treatment: \_\_\_\_\_

Home Phone: \_\_\_\_\_ Cell Phone: \_\_\_\_\_

Did injury require EMS/Hospital visit? Yes \_\_\_\_\_ No \_\_\_\_\_

Name of Hospital: \_\_\_\_\_

Hospital Phone Number: \_\_\_\_\_

Photographs Taken? Yes \_\_\_\_\_ No \_\_\_\_\_

**Signature of Injured Party:**

X \_\_\_\_\_

\_\_\_\_\_  
(Printed Name)

\_\_\_\_\_  
(Date)

**Signature of Injured Party if Medical Attention was Declined:**

X \_\_\_\_\_

\_\_\_\_\_  
(Printed Name)

\_\_\_\_\_  
(Date)

**Signature of Person Completing Report:**

X \_\_\_\_\_

\_\_\_\_\_  
(Printed Name)

\_\_\_\_\_  
(Date)

**Signature of Director/Owner:**

X \_\_\_\_\_

\_\_\_\_\_  
(Printed Name)

\_\_\_\_\_  
(Date)

SAMPLE

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## Biography of President



Jeff Dudley founded World Academy of Safety & Health (WASH) in 2020 in an effort to reduce water-related accidents by providing affordable and accessible training options to all populations. He has worked in aquatics since 1990. During this time, he served as Aquatics Director for Seapointe Village; Training Officer, Medic and Ocean Rescue Lieutenant for the Borough of Cape May Point; Official for the United States Lifesaving Association (USLA) National Lifeguard Championships; and has delivered lifeguard and lifesaving training and in-services across the world to pool and ocean lifeguards; police departments; 911 operators; and fire and EMS departments.

He holds both a bachelor's and master's degree as well as certifications across multiple states in special education, teacher of sciences, administrator I and II. He has worked as an educational professional since 1998 and has held positions of Teacher, Director of Athletics, Dean, Principal, and Head of School in both public and private settings. Dudley has been selected to serve on several school accreditation review committees.

Dudley lives in Baltimore County, Maryland.





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