



**World Academy of
Safety & Health**

SWIM SAFETY FOR COACHES MANUAL V.2022



Swim Safety for Coaches Manual, v.2022

Purpose:

This *World Academy of Safety & Health (WASH) Swim Safety for Coaches Manual, v.2022* 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.

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World Academy of Safety & Health (WASH)

P.O. Box 311

Riderwood, MD 21139 U.S.A.

1-800-484-0419

Email: admin@lifeguardcertifications.com

Web: 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 *Swim Safety for Coaches Manual, v.2022* 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) Swim Safety for Coaches Manual, v.2022* 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.

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.

This *Swim Safety for Coaches Manual, v.2022* must not replace or substitute for advanced medical care or emergency services response and treatment. Further, no information contained within this *Swim Safety for Coaches Manual, v.2022* should replace the need to seek care and/or advice from a physician, hospital staff member, or other licensed healthcare provider. Cooperation with local medical direction is necessary when developing a facility Emergency Action Plan (EAP) and best practices. Emergency services should always be contacted when there is an emergency situation.

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, Lifeguard Supervisors, and Swim Safety for Coaches.

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)

lifeguardcertifications.com

1-800-484-0419

admin@lifeguardcertifications.com

Monday-Friday 9:00am-5:00pm ET



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Purpose of Certification and Training Course

The purpose of the World Academy of Safety & Health (WASH) Swim Safety for Coaches 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 *World Academy of Safety & Health (WASH) Swim Safety for Coaches* course is **not** designed to:

- train lifeguards;
- train persons to supervise lifeguards.

In order to:

- provide lifeguard services and/or seek employment as a pool lifeguard, a person must successfully complete all requirements for certification as a WASH Pool Lifeguard;
- provide lifeguard supervision, successful completion of the WASH Lifeguard Supervisor course or an equivalent management or supervisory course is necessary.

Certification Policies & Procedures

Requirements for Successful Completion of the Swim Safety for Coaches 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 Swim Safety for Coaches 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.

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 Swim Safety for Coaches 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 Swim Safety for Coaches certificate.

This Swim Safety for Coaches recertification course requires successful completion of the following components for a participant to earn back their Swim Safety for Coaches certificate: pre-requisite physical skills as outlined in the Swim Safety for Coaches 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) Swim Safety for Coaches 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 Swim Safety for Coaches certificate.

Course Design

Course Overview:

The WASH Swim Safety for Coaches training course is intended for individuals who will seek employment as a Swim Coach at any level and at any aquatics facility.

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 Swim Coach. 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.

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 Swim Safety for Coaches Skills Assessment Form

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.

Introduction – Chapter I

The Professional Coach:

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.

Effective swim coaching is about more than developing stroke technique or building speed—it's about creating a safe, respectful, and supportive environment that fosters both performance and personal development. This chapter outlines the key responsibilities and professional standards that all swim coaches must uphold to ensure the safety and well-being of their swimmers.

The Coach as a Role Model

Swim coaches hold a position of authority and influence. Athletes, especially younger swimmers, often look to their coaches not only for instruction but also for behavioral cues. Coaches must embody professionalism in all aspects of their conduct.

Key attributes of professional swim coaches:

- **Integrity:** Demonstrate honesty in all interactions with athletes, parents, and peers.
- **Respect:** Foster a culture of mutual respect regardless of age, ability, gender, race, or background.
- **Consistency:** Enforce rules and standards evenly across all athletes.
- **Responsibility:** Accept accountability for the safety and conduct of all practices and competitions.

Safety-First Coaching Practices

Swim safety is a non-negotiable priority. Coaches must always operate with risk management in mind, both in and out of the water.

Essential safety responsibilities:

- **Lifeguard Presence:** Never conduct a swim session without certified lifeguard supervision or ensure that you yourself are certified and actively monitoring.
- **Head Counts:** Take regular roll calls, especially during open water training or crowded sessions.
- **Emergency Action Plans (EAPs):** Familiarize yourself and your athletes with emergency procedures. Regular drills should be conducted.
- **Equipment Checks:** Ensure that all starting blocks, lane lines, backstroke flags, and other gear are in proper working condition.
- **Environmental Awareness:** Be aware of pool chemistry, weather conditions (for outdoor practice), and facility-specific hazards.

Communication and Boundaries

A responsible coach maintains clear, professional boundaries with athletes and communicates effectively with both swimmers and their families.

Guidelines for healthy communication:

- **Transparency:** Keep parents informed about training goals, injuries, behavioral issues, and performance.
- **Appropriate Boundaries:** Avoid private communications via personal channels (texts, DMs). Use approved communication platforms and maintain visibility.
- **Constructive Feedback:** Focus on effort and improvement over criticism. Feedback should be clear, specific, and positive in tone.
- **Listening:** Be approachable and listen actively when athletes express concerns or report problems.

Preventing and Addressing Abuse and Misconduct

Coaches are legally and ethically obligated to prevent and respond to any form of abuse—physical, emotional, or sexual—within the swim program.

Responsibilities include:

- **Safe Sport Compliance:** Follow your national governing body's Safe Sport policies (e.g., USA Swimming's Safe Sport program).
- **Mandatory Reporting:** Know your legal obligation to report suspected abuse to appropriate authorities.
- **No Tolerance Policy:** Uphold a zero-tolerance stance toward harassment, bullying, or misconduct.
- **Supervision Protocols:** Never be alone in a changing area, vehicle, or hotel room with a minor athlete.

Professional Development and Lifelong Learning

Staying current with the latest in coaching science, safety protocols, and athlete wellness is a hallmark of professional swim coaching.

Coaches should:

- **Maintain Certifications:** Keep first aid, CPR, AED, and coaching certifications current.
- **Attend Clinics and Conferences:** Engage in continued education on safety, coaching technique, and youth development.
- **Mentor and Be Mentored:** Share knowledge with newer coaches and be open to learning from others.

Professional and responsible coaching isn't just about achieving results - it's about prioritizing the safety, well-being, and holistic development of swimmers. Coaches who uphold high ethical standards and practice vigilant safety protocols not only enhance performance but also earn the trust and respect of athletes, families, and the wider community.

By embracing your role as a mentor, leader, and protector, you contribute to a culture of safety and excellence in swimming—one practice at a time.

Creating & Maintaining Safe Environments:

Ensuring safety in and around swimming pools is a fundamental responsibility for every swim coach. A safe environment not only protects swimmers from harm but also cultivates trust, confidence, and a positive learning atmosphere. This chapter outlines the essential components of creating and maintaining a secure pool environment, emphasizing both preventive and responsive measures.

Understanding the Risks

Before safety measures can be implemented effectively, coaches must understand the potential hazards in aquatic environments. These include:

- **Slips, trips, and falls** on wet surfaces
- **Drowning and near-drowning incidents**
- **Chemical exposure or mishandling**
- **Electrical hazards near water**
- **Poor water quality**
- **Overexertion or hypothermia**
- **Inadequate supervision**

Being aware of these risks allows coaches to anticipate, prevent, and respond to emergencies appropriately.

Facility Safety Protocols

A. Pool Area Design and Maintenance

- **Non-slip surfaces:** Decks should be equipped with non-slip materials to reduce fall risk.
- **Clear signage:** Post clear, visible safety signs around the pool indicating depth, no-diving zones, and emergency procedures.
- **Barriers and fencing:** Ensure that the pool area is enclosed with child-proof fencing and self-closing gates to prevent unsupervised access.
- **Proper lighting:** Especially important for indoor pools and evening sessions.
- **Drain safety:** All pool drains should be compliant with the **Virginia Graeme Baker Pool & Spa Safety Act** to prevent entrapment.

B. Water Quality Management

- Maintain proper **chlorine and pH levels** to ensure the water is clean and free of harmful pathogens.
- Conduct regular testing (at least twice daily).
- Train staff to recognize signs of waterborne illness and contamination.

Safety Equipment and Emergency Preparedness

- **Lifeguard presence:** Certified lifeguards should be on duty whenever the pool is in use.
- **Emergency equipment:** Ensure easy access to:
 - Rescue tubes
 - Backboards
 - AED (Automated External Defibrillator)
 - First aid kits
 - Reaching and throwing equipment
- **Emergency action plan (EAP):** Every facility must have a documented, practiced EAP. Coaches should be trained to respond quickly and calmly to various emergencies.

Supervision and Behavior Management

- **Constant vigilance:** Coaches must actively supervise swimmers at all times, avoiding distractions such as phones or long conversations.
- **Ratio guidelines:** Follow recommended swimmer-to-coach/lifeguard ratios based on age and skill level.
- **Establish rules and routines:**
 - No running on the deck.
 - No horseplay or dunking.
 - Always enter the pool feet first unless in designated dive zones.
- **Set a tone of safety:** Model and expect respectful, cautious behavior from all participants.

Swimmer Safety Education

Educating swimmers is as critical as enforcing rules. Teach them:

- How to recognize and respect depth markers
 - The importance of never swimming alone
 - Basic self-rescue techniques
 - To alert an adult immediately if someone is in trouble
- Incorporate safety briefings into the start of each session, especially with younger or less experienced swimmers.

Staff Training and Continuing Education

- **CPR and First Aid Certification:** All coaches must maintain current certifications.
- **Regular drills:** Conduct mock emergency scenarios to keep staff alert and prepared.
- **Incident reviews:** After any incident, perform a thorough review to identify and correct weaknesses in the safety system.

Parental and Community Involvement

- Encourage open communication with parents about safety policies and procedures.
- Provide safety handouts or workshops for families.
- Collaborate with local health and safety organizations for resources and training.

Special Considerations

A. Open Water and Outdoor Pools

- Account for environmental factors like weather, wildlife, and water currents.
- Provide clear boundaries and ensure swimmers understand the limits.

B. Inclusive Safety

- Accommodate swimmers with disabilities through adaptive equipment, specialized instruction, and staff training.
- Be attentive to mental health needs that may impact a swimmer's comfort or safety in the water.

Conclusion

Creating and maintaining a safe environment in and around swimming pools is an ongoing process that requires vigilance, preparation, and collaboration. Coaches serve as the frontline defense in pool safety, and their commitment to these practices can mean the difference between a thriving program and a tragic incident. A culture of safety doesn't limit enjoyment or achievement—it empowers it.

By embedding safety into every aspect of your coaching, you ensure that the pool remains a place of growth, challenge, and fun—for everyone.

Legal Information for Coaches



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 coach, 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.

Purpose and Role of Lifeguard(s):

Primary Purpose

The primary purpose of lifeguards is to maintain a safe aquatic environment by preventing accidents, responding quickly to emergencies, and enforcing facility rules. During both swim practices and swim meets, lifeguards act as the first line of defense against incidents such as:

- Drowning or near-drowning situations
 - Slips, falls, and other poolside injuries
 - Medical emergencies, including heat exhaustion or cardiac issues
 - Unsafe behaviors (e.g., diving in shallow water, running on deck)
- Lifeguards must remain alert, impartial, and prepared to take immediate action to protect all individuals in and around the pool.

Role During Swim Practices

During swim practices, lifeguards are responsible for:

- **Monitoring swimmer safety:** Observing athletes during drills, warm-ups, and cool-downs to detect signs of distress or unsafe behavior.
- **Maintaining clear sightlines:** Lifeguards must not be distracted by coaching activities or athlete instruction. Their focus remains solely on swimmer safety.
- **Emergency response readiness:** Lifeguards should know the emergency action plan (EAP) for the facility and be ready to activate it at any moment.
- **Supporting coaches:** While lifeguards are not responsible for coaching, they collaborate with staff to maintain a safe training environment. They may alert coaches to unsafe conditions or behaviors that require attention.

Role During Swim Meets

Lifeguards have a heightened role during swim meets due to the increased number of participants and activity around the pool. Their responsibilities include:

- **Surveillance during all active water times:** Including warm-ups, competition, and warm-downs. Lifeguards should remain in assigned positions and maintain visual contact with all swim areas.
- **Crowd safety and awareness:** Lifeguards monitor not only swimmers but also spectators and support staff, ensuring that access to pool deck areas remains controlled and that emergency routes are kept clear.
- **Working with officials and event staff:** In case of emergencies, lifeguards coordinate with meet officials and medical personnel to ensure timely and efficient responses.
- **Environmental monitoring:** Lifeguards should be aware of water conditions, deck hazards, and weather issues (for outdoor events) that may impact swimmer safety.

Authority and Communication

Lifeguards have full authority to enforce safety protocols and remove individuals from the water if needed. They are empowered to pause practice or delay meet events in the event of a safety hazard. Effective communication between lifeguards, coaches, and meet officials is essential to maintaining a secure environment.

Lifeguard Expectations

- **Remain vigilant and undistracted** at all times while on duty.
- **Adhere to rotation schedules and breaks** to avoid fatigue.
- **Stay familiar with emergency equipment**, such as rescue tubes, AEDs, and backboards.
- **Report any incidents** in accordance with facility procedures.
- **Participate in regular in-service training** to maintain skills and certification.

Conclusion

Lifeguards are essential personnel at all swim practices and meets. Their presence not only ensures compliance with safety regulations but also reinforces a culture of awareness, prevention, and readiness that benefits all aquatic participants. Through vigilance, training, and communication, lifeguards help provide a safe and supportive environment in which athletes can train and compete.

Personal Protective Equipment – Chapter 2

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 coaching staff and lifeguard(s) 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 swim practice/meet and/or 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 swimmer or patron approaches a member of the coaching staff and/or lifeguard not feeling well but there is no sign of bodily fluid. Prior to initiating care and/or examining the patron, the coach and/or 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:

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



Figure C2.1

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 coaching staff and 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 the pool facility, coaching gear or equipment, 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 coach and/or 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



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 aquatic 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.

Facility Safety Protocols

A. Pool Area Design and Maintenance

- **Non-slip surfaces:** Decks should be equipped with non-slip materials to reduce fall risk.
- **Clear signage:** Post clear, visible safety signs around the pool indicating depth, no-diving zones, and emergency procedures.
- **Barriers and fencing:** Ensure that the pool area is enclosed with child-proof fencing and self-closing gates to prevent unsupervised access.
- **Proper lighting:** Especially important for indoor pools and evening sessions.
- **Drain safety:** All pool drains should be compliant with the **Virginia Graeme Baker Pool & Spa Safety Act** to prevent entrapment.

Enforcing Rules

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.

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 outcomes⁴. 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 (CO₂) level and delays the diver’s urge to breathe”².

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 blackout². 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 declined³. 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”².

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.

Emergency Action Plan (EAP)

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.

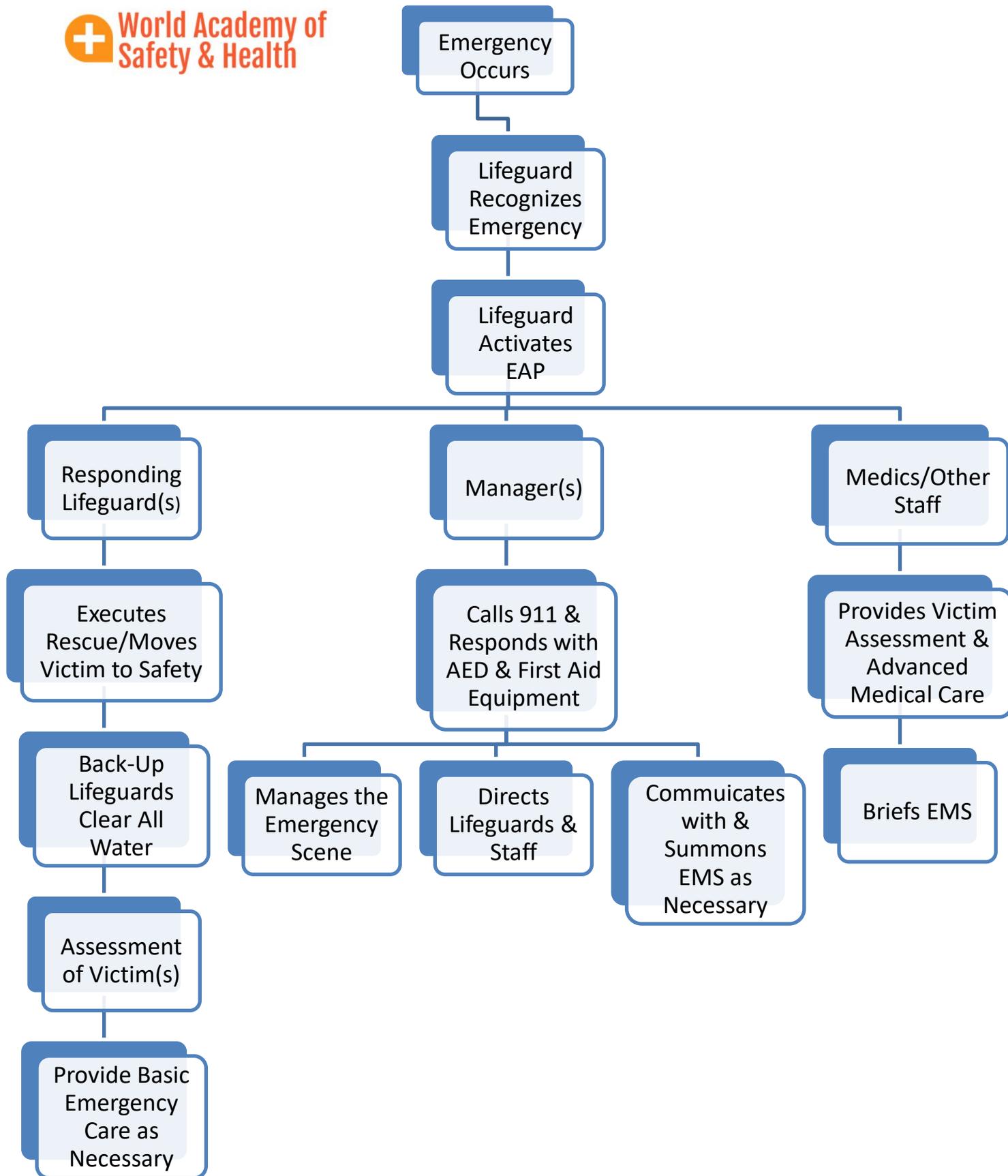
2. Communicate with Patrons:

- **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).

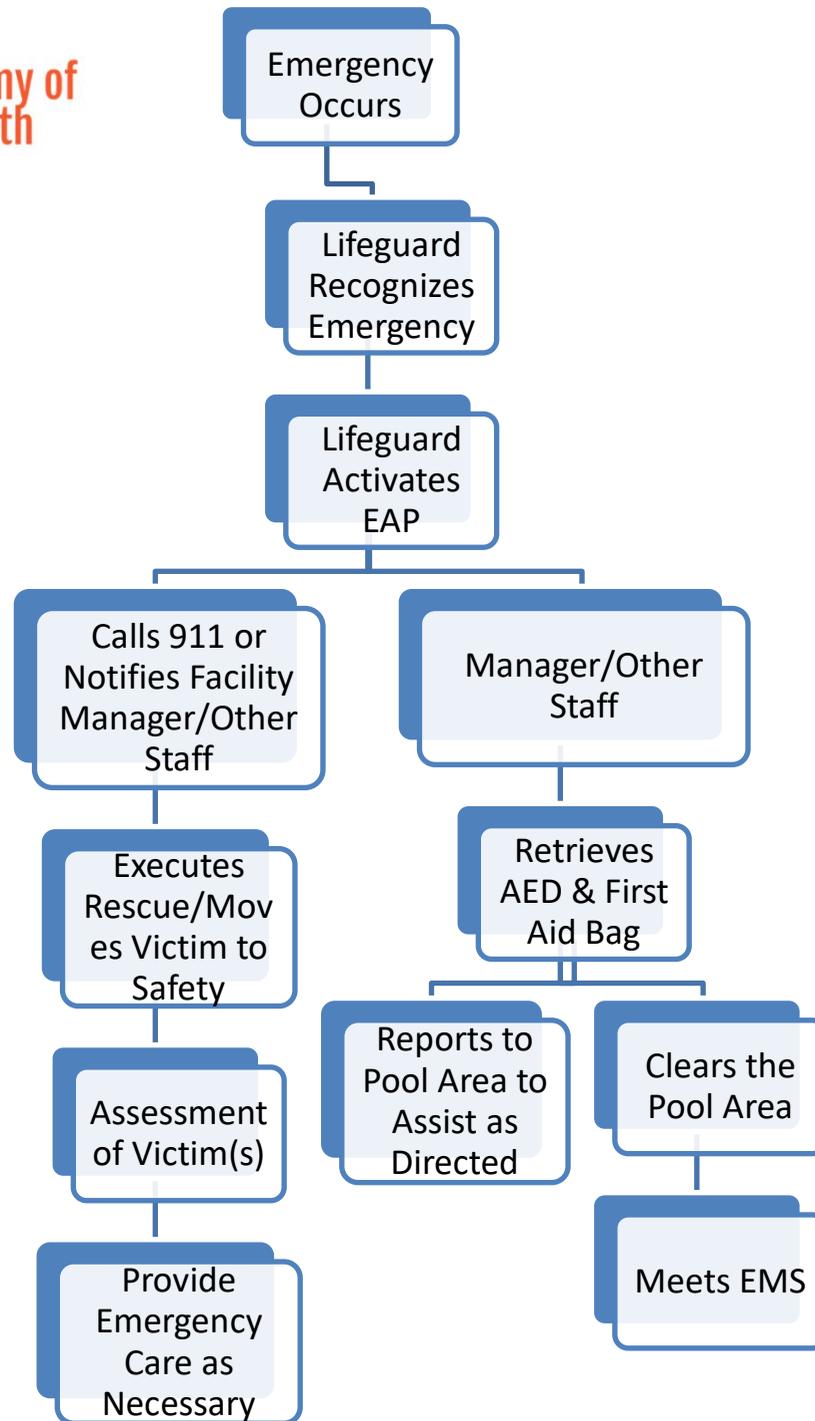
3. **Designate Roles:**
 - **Assign Tasks:** If there are multiple lifeguards, assign specific roles (e.g., one to continue CPR, another to manage patrons, and another to assist EMS upon arrival).
 - **Utilize Other Staff:** Involve other facility staff to help manage the situation, such as security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



Aquatics Facility Sample Emergency Action Plan (EAP) – One Lifeguard Facility



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

Drowning Process – Chapter 4

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 day⁵.

An additional 332 people died each year from drownings in boating-related incidents⁶.

About one in five people who die from drowning are children 14 years of age and younger⁵. For every child who dies from drowning, another five receive emergency department care for nonfatal submersion injuries⁵.

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 world⁵.

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 FOUR 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:

Swimmer and Swim Meet Safety – Chapter 5

Safety is the top priority in any aquatic program. As a coach, you are not only responsible for athlete development and performance but also for maintaining a safe environment during swim practices and meets. This chapter outlines the essential safety procedures and expectations for coaches to ensure the well-being of swimmers, staff, and spectators.

General Safety Responsibilities

Coaches must:

- **Be certified in CPR, First Aid, and Lifeguarding or Safety Training for Swim Coaches** as required by the governing body and facility.
- **Know and enforce the facility's Emergency Action Plan (EAP)** and report any safety hazards immediately.
- **Perform pre-session safety checks** of the pool area, including deck surfaces, equipment, lane lines, backstroke flags, diving blocks, and emergency equipment (e.g., AED, rescue tube).
- **Collaborate with lifeguards** by deferring to their authority in matters of safety and maintaining clear lines of communication.

Swim Practice Safety Procedures

Before Practice

- Arrive early to inspect the facility for hazards or obstructions.
- Ensure all safety equipment is accessible and functioning.
- Confirm the lifeguard is on duty before any swimmer enters the water.
- Communicate the practice plan and safety expectations to athletes.

During Practice

- Maintain active supervision; do not turn your back on the water.
- Use clear signals and maintain visual contact with swimmers at all times.
- Keep the pool deck free of clutter (e.g., bags, gear, chairs) to prevent trips or falls.
- Monitor swimmer behavior and health closely, watching for signs of fatigue, illness, or distress.
- Prohibit horseplay, unsupervised diving, or swimming in restricted areas.

After Practice

- Ensure all swimmers exit the water safely.
- Account for all athletes before ending the session.
- Report and document any incidents or near misses, following facility protocol.

Swim Meet Safety Procedures

Before the Meet

- Attend pre-meet briefings to review the Emergency Action Plan and safety logistics.
- Walk the facility to identify emergency exits, first aid stations, and designated warm-up/cool-down areas.
- Review the warm-up and warm-down lane assignments and safety rules with your team.
- Coordinate with meet officials and lifeguards about protocol for emergencies or injuries.

During the Meet

- Enforce one-way swimming and proper lane usage during warm-ups.
- Supervise swimmers at all times—even when they are not competing.
- Prevent athletes from diving into shallow ends or entering water without permission.
- Monitor weather conditions (for outdoor events) and follow meet director guidance in the event of lightning or severe weather.

After the Meet

- Ensure all team members are accounted for and leave the facility safely.
- Follow up on any safety incidents with meet officials and document as required.

Additional Meet and Practice Safety Information

Racing starts are one of the most explosive and technical components of competitive swimming. A properly executed start can give swimmers a strong advantage—but it also carries significant injury risk if performed incorrectly or in an unsafe environment.

This chapter outlines the key safety considerations, teaching techniques, and supervision protocols coaches must follow to ensure racing starts are practiced and performed safely at both training sessions and sanctioned swim meets.

Understanding the Racing Start

A racing start begins with the swimmer on the starting block, pool deck, or in the water (for backstroke) and involves a high-speed dive into the pool. Starts vary slightly by stroke, but they all share the common goals of speed, streamlined entry, and underwater propulsion.

Key Components of a Racing Start:

- **Set-up:** Foot position on the block or deck (track or grab start stance).
- **Take-off:** Forward motion initiated by leg drive and arm swing.
- **Flight:** Body travels through the air in a tight, streamlined shape.
- **Entry:** Hands, head, and upper body enter first, followed by legs.
- **Underwater Phase:** Glide and dolphin kick phase before breakout.

Safety Risks of Racing Starts

While racing starts are integral to competition, they are also one of the leading causes of serious swimming injuries, especially in shallow pools or among inexperienced swimmers.

Common Risks Include:

- **Head and Neck Injuries**
 - **Cause:** Improper entry angle or over-rotation in shallow water.
 - **Risk:** Cervical spine fractures or paralysis.
- **Slipping on the Block or Deck**
 - **Cause:** Wet surfaces, incorrect foot placement.
 - **Risk:** Abrasions, ankle injuries, or collisions with the block.
- **Mid-Air Collisions**
 - **Cause:** Poor spacing during practice starts or relays.
 - **Risk:** Head trauma, shoulder or facial injuries.
- **Overtraining or Fatigue**
 - **Cause:** Repeated starts without adequate rest.
 - **Risk:** Decreased coordination and increased likelihood of error.

Pool Depth and Facility Requirements

Ensuring the facility meets minimum standards is a cornerstone of start safety.

Minimum Water Depth for Racing Starts (as recommended by USA Swimming and FINA):

- **Off Starting Blocks:** Minimum depth of **1.35 meters (4.5 feet)** for practice; **1.22 meters (4 feet)** may be permitted at meets with specific oversight and athlete certification.
- **From Pool Deck:** Minimum depth of **1.22 meters (4 feet)**.
- **Deep-End Starts Preferred:** Whenever possible, conduct starts into the deepest part of the pool.

Coaching Checklist for Facility Safety:

- Is the water depth at start end clearly marked?
- Are starting blocks securely fastened and clean?
- Is the deck or block surface non-slip and dry?
- Are swimmers aware of the water depth?

Teaching Safe Racing Starts

Racing starts must be taught progressively, with swimmers mastering each component before moving to full-speed execution from blocks.

Progressive Start Instruction:

1. **Seated Entries and Streamlines**
 - Focus on body position, hand entry, and underwater glide.
2. **Kneeling and Standing Deck Starts**
 - Emphasize head position and controlled flight trajectory.
3. **Shallow-Water Training Starts (Minimum 6 ft Depth)**
 - Introduce flight and entry from the edge before block use.
4. **Block Starts (Once Certified)**
 - Teach foot placement (track or grab start), balance, and streamlined flight.

Technique Reminders:

- Enter with hands first, arms extended in a tight streamline.
- Keep chin tucked and body aligned to avoid a shallow or flat entry.
- Avoid entering head-first at a steep downward angle in shallow pools.

Certification and Supervision Requirements

USA Swimming and similar bodies require:

- **Racing Start Certification:** Swimmers under age 12 must complete a coach-supervised progression before being permitted to start from blocks.
- **Supervised Practice:** All start drills must be supervised by a certified coach or lifeguard.
- **Written Documentation:** Coaches must maintain records of start certification for each swimmer.

Meet-Day Start Safety Protocols

At swim meets, coaches play a vital role in ensuring that the racing start environment remains safe and orderly.

Coach Responsibilities at Meets:

- **Inspect Start Area:** Confirm block stability and water depth before competition begins.
- **Warm-Up Supervision:** Enforce designated start and circle swim lanes during warm-ups.
- **Enforce One-Way Starts:** Prohibit diving in both directions in start lanes.
- **Spacing and Readiness:** Ensure swimmers are adequately spaced and focused before each heat.
- **Monitor for Fatigue or Injury:** Pull athletes showing signs of dizziness, cramping, or disorientation.

Racing starts are dynamic and performance-critical, but their inherent risks demand a cautious, informed approach. Coaches are the first line of defense against unsafe practice and must emphasize technique, environment, and athlete readiness at every stage of training and competition.

By ensuring proper instruction, certified readiness, and vigilant supervision, coaches can help swimmers launch every race with confidence—and land safely, every time.

Emergency Response Protocol

In the event of an emergency:

1. **Activate the facility's EAP immediately.**
2. **Alert the lifeguard and/or facility staff.**
3. **Clear the pool if necessary.**
4. **Attend to the injured person only if you are trained and it is safe to do so.**
5. **Call 911 or ensure emergency services are contacted.**
6. **Remain calm, provide information clearly, and help guide emergency responders to the scene.**
7. **Complete all required incident reports.**

Additional Safety Guidelines

- **Hydration & Nutrition:** Encourage swimmers to stay hydrated and eat appropriately before and after practices/meets.
- **Weather Safety:** In outdoor pools, suspend practice if thunder or lightning is detected. Follow the 30-minute rule before resuming activity.
- **Behavior Management:** Set and enforce expectations for respectful, safe behavior on deck and in the water.
- **Mental Health & Emotional Safety:** Be alert to signs of emotional distress and foster a supportive team environment.

Coaches play a critical role in preventing accidents and ensuring a safe aquatic environment. By following these procedures consistently, you not only protect the athletes under your care but also set the tone for a culture of responsibility and preparedness. Safety is a shared responsibility, but it starts with leadership—and that begins with you.

Flip Turns

Flip turns are an essential skill for competitive swimming, allowing swimmers to reverse direction quickly and efficiently during freestyle and backstroke races. While technically demanding, flip turns also carry specific safety risks that coaches must manage, particularly when training novice swimmers or managing crowded lanes.

This chapter outlines the biomechanics of flip turns, the safety concerns associated with practicing them, and coaching strategies to ensure that all athletes perform them safely and effectively.

Understanding the Flip Turn

A flip turn is a swimming maneuver used to reverse direction at the wall without stopping. In freestyle and backstroke, swimmers perform a forward somersault into the wall, plant their feet, and push off into a streamlined position for the next lap.

Phases of a flip turn:

1. **Approach** – Swimmer times the last few strokes to arrive at the wall with optimal body position.
2. **Initiation** – A tucked somersault is executed close to the wall.
3. **Wall Contact** – Feet make contact with the wall in a compact, horizontal position.
4. **Push-Off** – Swimmer drives off the wall with legs fully extended.
5. **Streamline & Transition** – Body stays streamlined with a glide and underwater dolphin kicks before resurfacing.

Common Safety Risks

Though flip turns increase performance efficiency, they also pose several safety risks that coaches must address during training:

I. Head and Neck Injuries

- **Cause:** Misjudging the wall distance or poor somersault technique can lead to head-first collisions with the wall.
- **Prevention:** Emphasize spatial awareness and proper timing. Use drills to build confidence and control.

2. Collisions with Other Swimmers

- **Cause:** Swimmers crowding the wall during turns or passing too closely.
- **Prevention:** Maintain proper spacing in lanes. Enforce no-passing zones near the wall during turn drills.

3. Slipping on the Wall

- **Cause:** Poor foot placement or inadequate push-off mechanics.
- **Prevention:** Teach proper foot positioning and wall traction technique. Check wall surfaces for slipperiness.

4. Hyperventilation or Disorientation

- **Cause:** Inexperienced swimmers may become confused or breath-hold too long during the turn.
- **Prevention:** Progress gradually and monitor closely. Teach breathing cues and streamline timing.

Coaching Safe Flip Turn Technique

A step-by-step coaching approach helps reduce risk and reinforce proper mechanics.

Progressive Teaching Steps:

1. **Dryland Drills**
 - Practice somersaults and core activation exercises on land to build body awareness.
2. **Stationary Tucks and Somersaults in Water**
 - Have swimmers practice somersaults in shallow water away from the wall.
3. **Wall-Focused Drills**
 - Introduce flip turns with floating pushbacks or in-place somersaults with gentle wall taps.
4. **Half Turns**
 - Swimmers execute the turn and push off without swimming the approach first.
5. **Full Flip Turn with Swim-In and Push-Off**
 - Emphasize approach timing, head position, and streamline on push-off.

Key Technical Points to Emphasize:

- **Look down and tuck quickly** – Avoid lifting the head toward the wall.
- **Explosive push-off** – Plant feet hip-width apart and extend fully into a tight streamline.
- **Controlled breathing** – Instruct swimmers to exhale gently during the turn to prevent breath-holding stress.

Backstroke Start Safety

Backstroke starts come with their own risks and must also be practiced with care.

Key Safety Points:

- Ensure grip handles are secure.
- Instruct swimmers to avoid pushing off too far underwater to prevent hitting the lane lines or wall.
- Teach controlled, shallow arching movement to minimize water resistance and impact.

Backstroke Entry Progression

Teaching a safe and effective backstroke start requires a structured progression that builds confidence, coordination, and body awareness. The backstroke start is unique in that the swimmer begins in the water, gripping the starting block or pool wall, and propels backward into a streamlined position. To execute this start safely and legally, swimmers must master proper foot placement, explosive hip movement, and a clean water entry.

Start with fundamentals. Begin by having swimmers practice body positioning and grip while stationary. Teach them to place their feet hip-width apart on the wall, toes just below the surface, with knees bent and hips close to the wall. Hands should grip the block handles or gutter securely, with arms straight and head tucked slightly. Encourage swimmers to press their chest back and float lightly, building comfort with the arched setup position.

Progress to push-and-float drills. Once body position is solid, have swimmers push backward gently without full flight. The goal is to develop hip drive and understand the arched flight path. Use drills where swimmers push off and float into a streamline on their backs, focusing on smooth water entry with minimal splash. Reinforce keeping the head still and arms tight during the movement.

Introduce full starts with focus on timing and control. As swimmers become more confident, incorporate full backstroke starts off the wall or starting blocks. Emphasize a powerful leg drive, coordinated hip lift, and clean entry through a narrow hole in the water, with minimal splash. Watch for common issues such as over-rotation, flat entries, or poor streamline position. Offer individual feedback and consider video analysis to help athletes visualize and refine their technique.

Teaching backstroke starts in a progressive, supportive manner helps swimmers develop a consistent, safe, and legal start. By breaking down each element and reinforcing good habits, coaches can set their athletes up for long-term success in both training and competition.

Environmental and Facility Considerations

Safety during flip turns also depends on pool design and environment.

- **Wall Design:** Ensure that pool walls have safe, cushioned edges or non-abrasive surfaces.
- **Water Depth:** Avoid flip turns in shallow water less than 4 feet (1.2 meters). Designate no-turn zones where necessary.
- **Visibility:** Maintain good underwater visibility. Clean pool walls and bottoms regularly.
- **Lane Management:** Limit lane overcrowding. Assign swimmers of similar speed to the same lane.

Supervision and Correction

Coaches must actively supervise flip turn drills and offer frequent corrections. Watch for signs of poor technique or swimmer discomfort.

Coach's checklist during turn drills:

- Is the swimmer initiating the turn at the correct distance?
- Is the somersault tight and controlled?
- Are the feet contacting the wall horizontally, not vertically?
- Is the push-off streamlined and safe?
- Are swimmers spaced adequately in the lane?

If a swimmer struggles or becomes disoriented, stop the drill and provide one-on-one guidance.

Flip turns enhance a swimmer's speed and efficiency, but mastering them safely requires careful coaching, progressive training, and constant supervision. By emphasizing technique, environmental awareness, and responsible practice management, coaches help their swimmers build not only faster turns—but also safer ones.

Always remember: a fast turn is only effective if it's executed safely.

Open Water Event Safety

Open water swim events present unique safety challenges compared to pool-based activities. As a coach, your role extends beyond performance preparation to ensuring athletes understand and adhere to open water safety protocols. Environmental unpredictability, limited visibility, and broader course areas require enhanced vigilance and planning.

Coach Responsibilities

Pre-Event Preparation

- **Know the course:** Walk or review the swim course layout, including start/finish points, buoy placement, and emergency access areas.
- **Understand conditions:** Review weather forecasts, water temperature, currents, tides, and wind conditions.
- **Ensure athlete readiness:** Confirm swimmers are experienced in open water and have trained appropriately for the distance and conditions.
- **Safety equipment:** Ensure all athletes wear brightly colored swim caps and are familiar with signaling for help (e.g., raising a hand, floating on back).

Briefing and Supervision

- Participate in the pre-race safety briefing and ensure athletes attend.
- Emphasize course rules, navigation techniques, hydration, and pacing.
- Identify safety personnel (lifeguards, kayakers, boats) and explain how to seek assistance if needed.
- Supervise athletes closely during check-in, warm-up, and entry to the water.

Emergency Planning

- Know the event's emergency action plan and evacuation procedures.
- Ensure quick access to first aid and medical support.
- Be prepared to act immediately if a swimmer is reported missing, injured, or in distress.

Post-Race Safety

- Confirm all athletes check out of the water and are accounted for.
- Monitor swimmers for signs of hypothermia, heat exhaustion, or dehydration.
- Provide time for cooldown, rehydration, and debriefing.

Key Reminders

- Always prioritize safety over competition.
- Adapt to conditions—cancel or adjust participation if water is unsafe.
- Promote open communication—encourage athletes to speak up if they feel unwell or unprepared.

By taking a proactive and informed approach, coaches help ensure that open water events are both competitive and safe experiences for all athletes.

MRSA Prevention

MRSA is a type of staph bacteria that is resistant to many antibiotics and can cause serious skin and soft tissue infections. While chlorinated pool water can help reduce the risk of bacterial spread, MRSA is more commonly transmitted through direct skin-to-skin contact, shared equipment, and contaminated surfaces in locker rooms or on pool decks. Swim coaches play a critical role in preventing MRSA outbreaks by fostering good hygiene habits, maintaining clean environments, and educating athletes.

Encourage and model proper hygiene practices. Swimmers should shower with soap immediately after practice or competition, especially if they have used shared facilities like starting blocks, kickboards, or weight rooms. Cuts, scrapes, or abrasions—common in swimmers—should be cleaned, properly covered with waterproof bandages, and monitored for signs of infection. Athletes should avoid sharing towels, razors, or personal gear such as goggles and swim caps.

Keep training environments clean. Coaches should ensure that locker rooms, benches, and shared equipment are disinfected regularly using EPA-registered cleaners effective against staph bacteria. Kickboards, pull buoys, and resistance tools should be rinsed and allowed to dry after each use. Swimmers with visible skin infections or open wounds should be temporarily restricted from water activities until cleared by a medical professional.

Educate swimmers and staff. Help athletes and assistant coaches recognize the signs of MRSA, which often begins as red, swollen, painful bumps that may resemble pimples or spider bites. Early detection and treatment are critical to preventing the infection from spreading. Create a team culture that encourages reporting injuries or skin issues promptly and destigmatizes seeking medical help.

By implementing these preventive measures consistently, coaches can significantly reduce the risk of MRSA transmission and promote a healthier, safer training environment for all athletes.

Surveillance, Scanning, Zones of Coverage & Victim Recognition – Chapter 6

Surveillance

Lifeguards and members of the coaching staff 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

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.

Victim Recognition

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 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:

Water Emergencies - Chapter 7

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 CI0.2

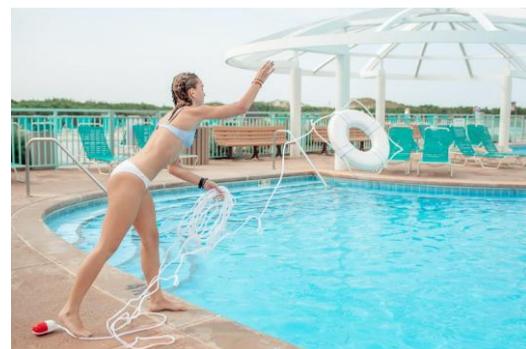


Figure CI0.1

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 C10.3



Figure C10.4

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 C10.30



Figure C10.31

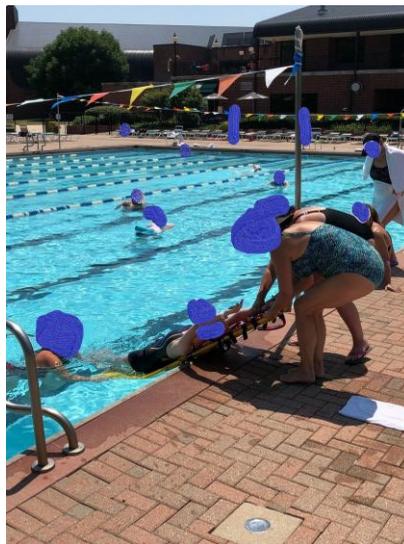


Figure C10.32

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 Seven 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 8

Recognizing Signs & Symptoms

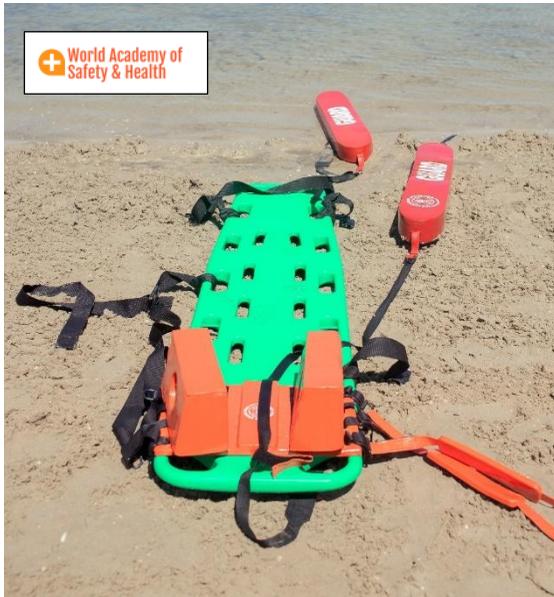


Figure C11.1

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

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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, paralyzation 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 risks¹⁸.

- *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 intoxication¹⁸*

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 immobilization¹⁸.*

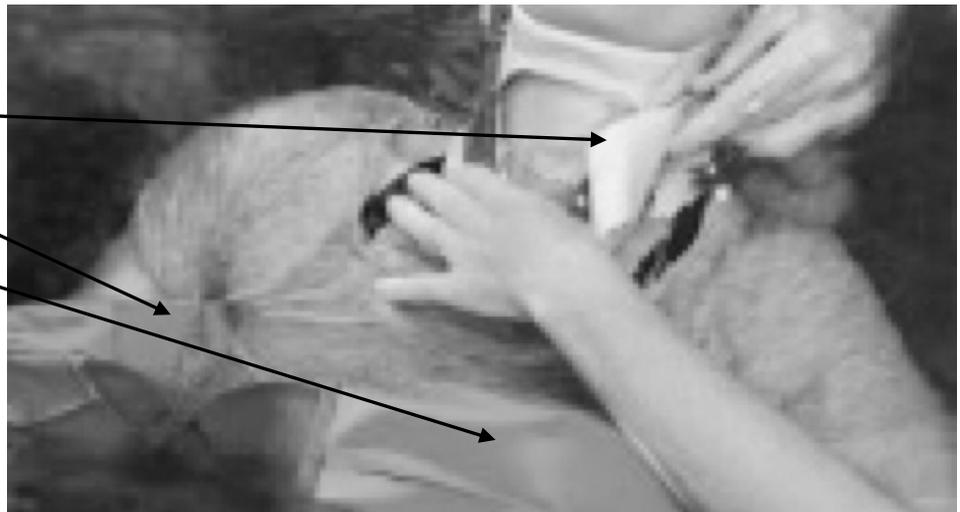
Do we backboard? Do we use a C-collar? Do we only use manual inline stabilization?

- 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 C11.3



Figure C11.4

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 CII.5



Figure CII.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 ⁵.

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.



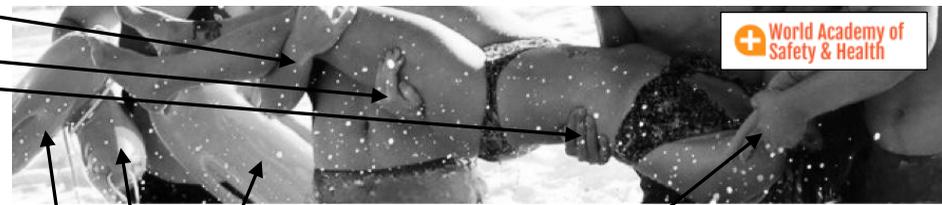
Figure CII.14



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 standing⁵. 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 neck⁵.

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

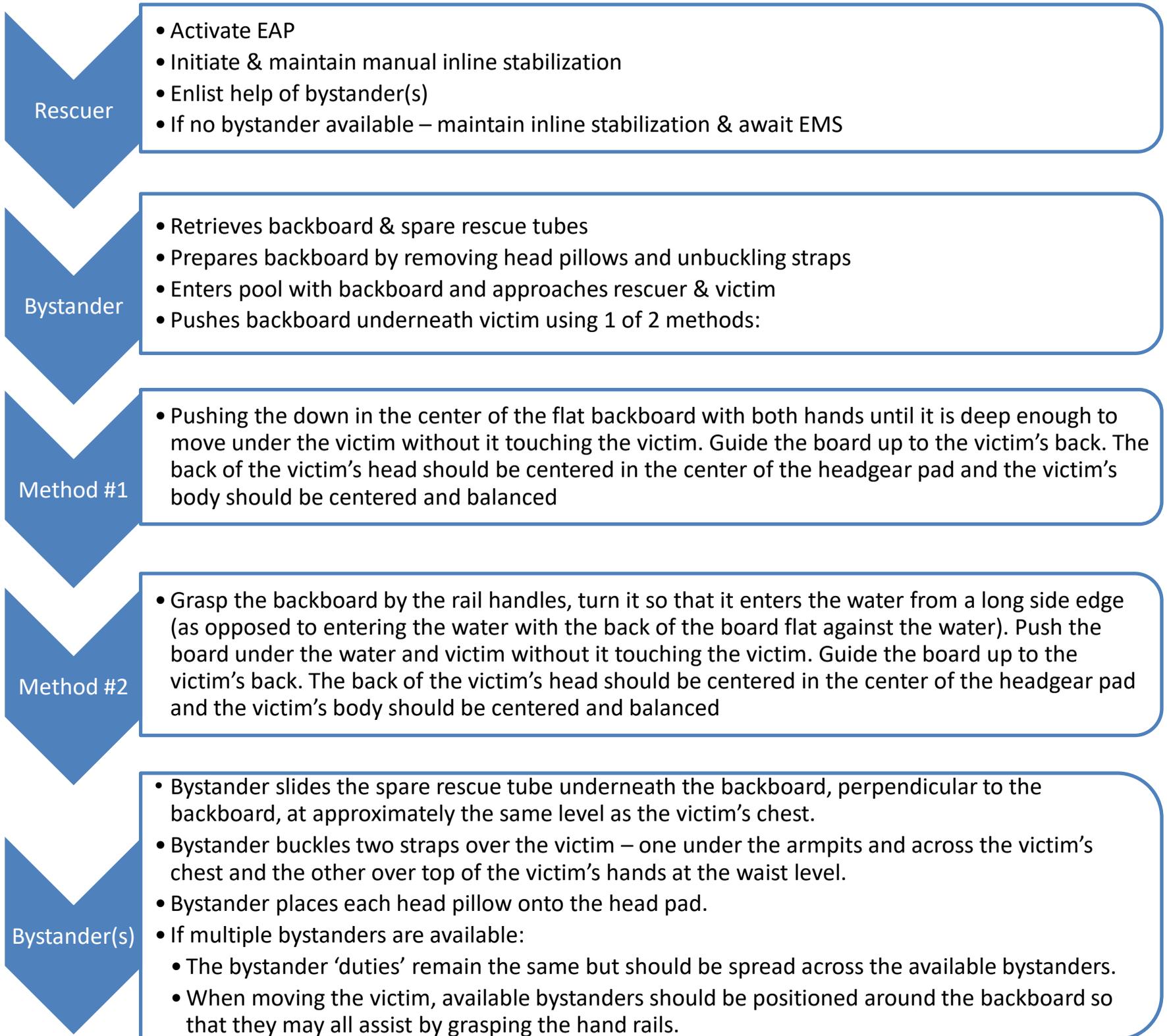
1. **Shallow Water Diving:**
 - **Depth:** Typically, shallow water is defined as being less than 5 feet (1.5 meters) deep.
 - **Allowable Dives:** Feet-first entries are generally permitted, as these minimize the risk of injury. Head-first dives should never be permitted in shallow water to prevent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

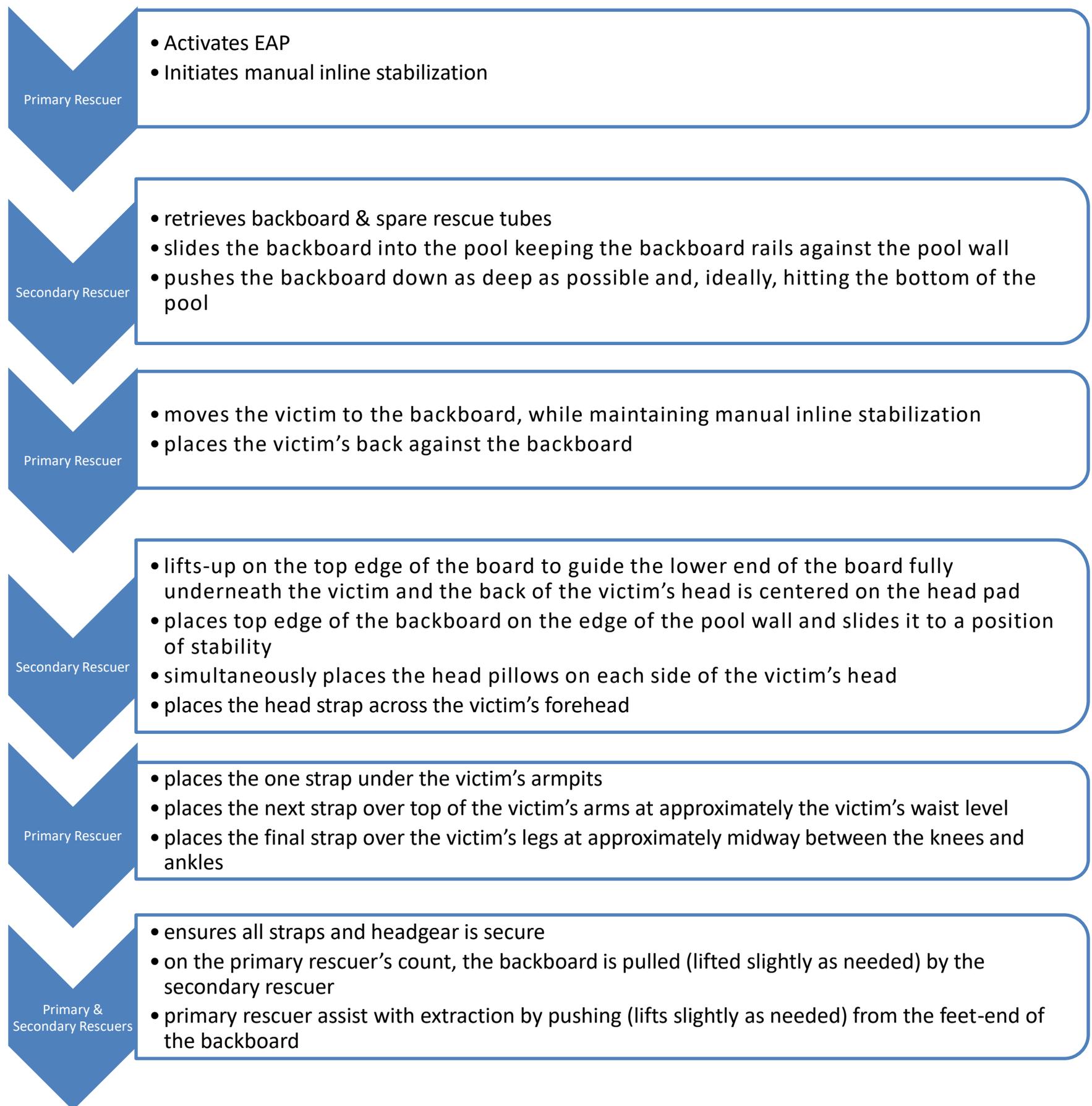
1. **Type of Dive:** The technique being used (e.g., head-first vs. feet-first) will influence the allowable diving depth. Head-first dives require deeper water to avoid injury.
2. **Pool Design:** Different pools have varying depths, and specific sections may be designated for diving. It’s important 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

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
- pushes down in the center of the flat backboard with both hands until it is deep enough to move under the victim without it touching the victim
- 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

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 Eight Recap

- I. 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?

CPR/AED/First Aid – Chapter 9

Heart Attack

SIGNS AND SYMPTOMS MAY INCLUDE:

- Chest Pain-pressure, tightness, radiates to jaw and arm(s)
- Nausea & Sweating
- Shortness of Breath
- Weakness
- Denial

Gender can impact the signs and symptoms of heart attack. Females may not experience any chest pain or pressure. Instead, a heart attack can present as a shortness of breath, tiredness, and/or feeling ill with flu-like symptoms.

TREATMENT;

Recognize the Signs and Symptoms

Activate Emergency Action Plan (EAP)

Position Patient in Most Comfortable Position while Maintaining Calm

Provide a Dose of Aspirin

CARDIAC CHAIN OF SURVIVAL:

- **Early Recognition**
- **Early Activation of EAP & EMS**
- **Early CPR**
- **Early Defibrillation (AED use)**
- **Early Advanced Life Support**

Stroke:

SIGNS AND SYMPTOMS MAY INCLUDE:

- Severe Headache
- Slurred Speech
- Numbness, Weakness, and/or Paralyzation of one side of the body to include any combination of face, leg, and arm.
- Difficulty seeing and/or changes in vision in one or both eyes.
- Difficulty walking and/or inability to walk.

A commonly accepted method to assess if a person is experiencing a stroke is to use the acronym F.A.S.T.:

F: Facial Droop

A: Arm Drift

S: Speech

T: Time

There are 2 types of strokes:

Ischemic - a clot in a blood vessel that restricts or obstructs blood flow to the brain.

Hemorrhagic - a blood vessel that ruptures and prevents blood flow to the brain. In either case, the brain is deprived of oxygen and tissue starts to die. The longer the stroke goes unrecognized and untreated, the more damage is done

TREATMENT:

Recognize the Signs and Symptoms

Activate Emergency Action Plan (EAP)

Position Patient in Most Comfortable Position while Maintaining Calm

Monitor Vital Signs and Provide Rescue Breathing/CPR as Needed

Rescue Breathing:

Rescue breathing is to be used for a victim who has a pulse (has a heartbeat and blood flow) but who is not breathing on his/her own. Blood flow that has little to no oxygen is a life-threatening condition and can result in the victim having a seizure, falling into a coma, or not surviving the medical event. It only takes approximately ten (10) minutes without oxygen for a person's brain to die.

Rescue breathing is the act of a rescuer providing ventilations to a victim to ensure the blood flow is oxygenated to keep one's vital organs functioning.

Steps for Rescuer Providing Rescue Breathing:

- CHECK SCENE FOR SAFETY
- CHECK LEVEL OF CONSCIOUSNESS (LOC) OF THE VICTIM
- ACTIVATE EMERGENCY ACTION PLAN (EAP) & EMS
- CHECK PULSE FOR NO MORE THAN TEN (10) SECONDS
 - If no pulse, ***MOVE TO THE CPR SECTION***
 - If has a pulse BUT NO BREATHING:
 - ***BEGIN RESCUE BREATHING IMMEDIATELY***

ADULT

1 BREATH EVERY 5-6 SECONDS

CHILD

2 INITIAL BREATHS
1 BREATH EVERY 2-3 SECONDS
RE-ASSESS CIRCULATION EVERY TWO (2) MINUTES
CONTINUE RESCUE BREATHING IF PULSE & NO BREATHING
START CPR IF NO PULSE

INFANT

1 BREATH EVERY 2-3 SECONDS

CPR:

Adult:

- CHECK SCENE FOR SAFETY
- CHECK LEVEL OF CONSCIOUSNESS (LOC) OF THE VICTIM
- ACTIVATE EMERGENCY ACTION PLAN (EAP) & EMS
- CHECK PULSE (at the Carotid Artery located on either side of victim's neck immediately adjacent to the adams apple) FOR NO MORE THAN TEN (10) SECONDS

- IF HAS A PULSE, GO BACK TO RESCUE BREATHING
- IF NO PULSE, IMMEDIATELY BEGIN CHEST COMPRESSIONS:

COMPRESSIONS & BREATHS

- LANDMARK: BULLSEYE IN CENTER OF CHEST
- INTERLOCK FINGERS, LOCK ELBOWS, PIVOT AT WAIST
- 30 COMPRESSIONS
- 1 ½ - 2 INCHES IN DEPTH
- RATE OF 100-120 COMPRESSIONS PER MINUTE
- FOLLOWING THE INITIAL 30 COMPRESSIONS, OPEN AIRWAY (head tilt-chin lift)
- PROVIDE 2 BREATHS ENOUGH TO MAKE CHEST RISE
- CONTINUE 4 CYCLES OF 30 COMPRESSIONS TO 2 BREATHS
- RECHECK VITAL SIGNS & PROVIDE APPROPRIATE CARE

Child:

- CHECK SCENE FOR SAFETY
- CHECK LEVEL OF CONSCIOUSNESS (LOC) OF THE VICTIM
- ACTIVATE EMERGENCY ACTION PLAN (EAP) & EMS
- CHECK PULSE (at the Carotid Artery located on either side of victim's neck immediately adjacent to the adams apple) FOR NO MORE THAN TEN (10) SECONDS

- IF HAS A PULSE, GO BACK TO RESCUE BREATHING
- IF NO PULSE, IMMEDIATELY BEGIN CHEST COMPRESSIONS:

COMPRESSIONS 7 BREATHS

- LANDMARK: BULLSEYE IN CENTER OF CHEST
- USE JUST ONE HAND , LOCK ELBOW, PIVOT AT WAIST
- 30 COMPRESSIONS
- 1 - 1 ½ INCHES IN DEPTH (or 1/3 depth of chest)
- RATE OF 100-120 COMPRESSIONS PER MINUTE
- FOLLOWING THE INITIAL 30 COMPRESSIONS, OPEN AIRWAY (head tilt-chin lift)
- PROVIDE 2 BREATHS ENOUGH TO MAKE CHEST RISE
- CONTINUE 4 CYCLES OF 30 COMPRESSIONS TO 2 BREATHS
- RECHECK VITAL SIGNS & PROVIDE APPROPRIATE CARE

Infant:

- CHECK SCENE FOR SAFETY
- CHECK LEVEL OF CONSCIOUSNESS (LOC) OF THE VICTIM
- ACTIVATE EMERGENCY ACTION PLAN (EAP) & EMS
- CHECK PULSE (at the Brachial Artery located on inside of either arm, midway between the elbow on shoulder) FOR NO MORE THAN TEN (10) SECONDS

- IF HAS A PULSE, GO BACK TO RESCUE BREATHING
- IF NO PULSE, IMMEDIATELY BEGIN CHEST COMPRESSIONS:

COMPRESSIONS & BREATHS

- LANDMARK: INDEX FINGER ON NIPPLE OPPOSITE RESCUER; DRAG TO CENTER OF CHEST; DROP MIDDLE & RING FINGERS
- USE TWO FINGERS (your middle and ring fingers mentioned above)
- 30 COMPRESSIONS
- ½ - 1 INCH IN DEPTH (or 1/3 depth of chest)
- RATE OF 100-120 COMPRESSIONS PER MINUTE
- FOLLOWING THE INITIAL 30 COMPRESSIONS, OPEN AIRWAY (slight head tilt only)
- PROVIDE 2 BREATHS ENOUGH TO MAKE CHEST RISE
- CONTINUE 4 CYCLES OF 30 COMPRESSIONS TO 2 BREATHS
- RECHECK VITAL SIGNS & PROVIDE APPROPRIATE CARE

Two-Rescuer:

RESCUER ONE:

- CHECK SCENE FOR SAFETY
- CHECK LEVEL OF CONSCIOUSNESS (LOC) OF THE VICTIM

RESCUER TWO:

- ACTIVATE EMERGENCY ACTION PLAN (EAP) & EMS

RESCUER ONE:

- CHECK PULSE (Carotid artery for Adult & Child victims; Brachial Artery for Infant victims all as described above) FOR NO MORE THAN TEN (10) SECONDS
 - IF HAS A PULSE, GO BACK TO RESCUE BREATHING
 - IF NO PULSE, IMMEDIATELY BEGIN CHEST COMPRESSIONS:

COMPRESSIONS & BREATHS

RESCUER ONE:

- LANDMARK:
 - **ADULT/CHILD** - BULLSEYE IN CENTER OF CHEST
 - **INFANT** - INDEX FINGER ON NIPPLE OPPOSITE RESCUER; DRAG TO CENTER OF CHEST; DROP MIDDLE & RING FINGERS
- USE TWO FINGERS (your middle and ring fingers mentioned above)
- 30 COMPRESSIONS
- (as described above for adults, children, & infants) ½ - 2 INCHES IN DEPTH
- RATE OF 100-120 COMPRESSIONS PER MINUTE

RESCUER TWO:

- POSITION SELF EITHER AT SIDE OF VICTIM'S HEAD OPPOSITE RESCUER ONE OR AT TOP OF VICTIM'S HEAD
- DURING THE INITIAL 30 COMPRESSIONS, OPEN AIRWAY (slight head tilt only)
- PROVIDE 2 BREATHS ENOUGH TO MAKE CHEST RISE

RESCUER ONE & TWO:

- CONTINUE 4 CYCLES OF 30 COMPRESSIONS TO 2 BREATHS
- RECHECK VITAL SIGNS & PROVIDE APPROPRIATE CARE

RESCUER ONE & TWO:

- RESCUER ONE BECOMES TRED FROM PROVIDING COMPRESSIONS & CALLS FOR A CHANGE CYCLE
- CYCLE CONCLUDES WITH 2 BREATHS; RESCUER ONE & TWO CHANGE PLACES; RESCUER ONE RECHECKS CRCULATION & BREATHNG; RESCUER TWO LNDMARKS ON VICTIM'S CHEST; APPROPRATE EMERGENCY CARE PROVIDED
- CHANGING PLACES SHOULD TAKE RESCUER ONE & RESCUER TWO NO MORE THAN TEN SECONDS

Automated External Defibrillator (AED):

Early defibrillation is a crucial component in the Cardiac Chain of Survival. The victim's chance of surviving the event is decreased by approximately 10% for each minute that AED usage is delayed. While AED usage as early as possible can increase the victim's chance of survival by as much as 50%.

If a rescuer is unable to access the AED unit him or herself, a bystander should be sent to retrieve the AED as soon as possible. Once the AED arrives on scene, CPR should continue without interruption while the AED is set-up and pads attached.

AED USAGE STEPS:

- Turn on the AED.
- Expose victim's bare chest – i.e. remove clothing; shave male's chest hair as needed; remove jewelry around neck.
- Place AED pads on the victim's bare chest – i.e. .
- Rescuer operating the AED should 'Stand Clear' and verbally announce to others to also 'Stand Clear'.
- AED will analyze the victim's heart rhythm and announce either:
 - NO SHOCK ADVISED, CONTINUE CPR
 - SHOCK ADVISED
- If shock is advised:
 - Yell 'SHOCK ADVISED, EVERYBODY STAND CLEAR'.
 - Make certain nobody is touching the victim or the stretcher or anything else that is in contact with the victim.
 - Hover finger over the 'SHOCK' button while keeping eyes looking head to toe of the victim to ensure nobody else is in contact prior to shocking.
 - Press the 'SHOCK' button with eyes on victim.
 - Begin CPR until the victim shows signs of life OR the AED unit begins to re-analyze the victim's heart rhythm.

ADDITIONAL AED INFORMATION:

- Victim can be wet but should be moved out of any puddles or standing water.
- Victim should be moved off any metal surface.
- Pads placed on the victim according to the image on the AED pad itself:
 - Do not place on top of pacemaker, scar, or other bump on the victim – adjust pad placement
 - Use pediatric pads on victims under 55pounds or 8 years of age or younger.
 - If you do not have pediatric pads, the adult pads should be placed with one in the center of the chest and the other pad in the center of the back.
- Once the pads are placed on the victim and/or the machine is turned on, NEVER remove the pads or turn off the AED unit.

Special Situations:

Modified Jaw Thrust:

The jaw thrust maneuver is an alternate technique used to open a victim's airway when spinal trauma is suspected. It allows the rescuer to open the airway without compromising the head, neck, or back. If one attempts to open the airway using the modified jaw thrust but are unsuccessful after multiple attempts, one should use the head tilt-chin lift technique – it is more important to open the airway of an unresponsive, non-breathing victim than it is to maintain spinal integrity.

HOW TO PERFORM THE MODIFIED JAW THRUST:

- Position oneself at the top of the victim's head
- Place and seal CPR pocket mask on victim
- Place hands on each side of victim's face
- Place one thumb on the left-side and the other on the right-side of the victim's chin
- Place a few fingers under the victim's lower jaw near to the corner of the jawbone
- Lift up with one's fingers while pushing downward on the victim's chin with one's thumbs/keep one's thumbs in place on the chin/cheekbones

Bag Valve Mask (BVM):

Regular practice and multiple rescuers are needed to effectively and efficiently use a BVM. Use of a BVM is advantageous for the victim – namely, it allows a higher concentration of oxygen to enter the victim's lungs when compared to ventilations provided by a rescuer using a pocket mask.

CPR Masks & PPE:

There are adult and pediatric sizes of CPR pocket masks and bag valve masks. If providing rescue breathing and/or CPR to a pediatric victim, a pediatric pocket mask or BVM should be used. If no pediatric mask is available, the adult sized mask is to be used but turned upside down so that the 'nose' portion of the mask sits on the pediatric victim's chin. This technique will allow the mask to be tightly sealed on the victim's face.

Rescuers should always use protective nitrile gloves when caring for any victim. Gloves should be worn from the start and prior to administering any assessment or emergency care.

Conscious Choking:

Adult & Child:

- CHECK SCENE FOR SAFETY
- ASK VICTIM IF HE/SHE IS CHOKING
- OBTAIN CONSENT
- IF VICTIM UNABLE TO BREATHE, COUGH, OR SPEAK, ACTIVATE EMERGENCY ACTION PLAN (EAP) & EMS
- STAND BEHIND THE VICTIM; SPREAD LEGS SO THAT RESCUER HAS A WIDE BASE; REACH ARMS UNDERNEATH THE VICTIM'S ARMS
- USE ONE HAND TO LOCATE VICTIM'S NAVEL
- MAKE FIST AND PLACE THIS FIST JUST ABOVE THE VICTIM'S NAVEL
- PROVIDE ABDOMINAL THRUSTS – PULL UP AND IN LIKE A FISH HOOK SHAPE OR THE LETTER 'J'
- CONTINUE PROVIDING ABDOMINAL THRUSTS UNTIL:
 - THE OBSTRUCTION COMES OUT OR;
 - THE VICTIM BECOMES UNRESPONSIVE
- IF VICTIM BECOMES UNRESPONSIVE, GUIDE VICTIM TO GROUND CUSHIONING THE BACK OF THE HEAD
- TREAT AS AN UNCONSCIOUS CHOKING VICTIM AS DESCRIBED IN THE NEXT SECTION

Infant:

- CHECK SCENE FOR SAFETY
- OBTAIN PARENT/LEGAL GUARDIAN CONSENT
- IF INFANT UNABLE TO COUGH, CRY, BREATHE, ACTIVATE EMERGENCY ACTION PLAN (EAP) & EMS
- PLACE FOREARM DOWN CENTER OF INFANT'S CHEST; PLACE INDEX FINGER & THUMB ON EACH SIDE OF INFANT'S LOWER JAW RESPECTIVELY; PLACE FOREARM ON OWN LEG TO POSITION INFANT'S HEAD LOWER THAN BODY TO ALLOW GRAVITY TO ASSIST IN DISLODGING THE OBJECT FROM THE AIRWAY
- USE OTHER HAND TO PROVIDE 5 BACK BLOWS WITH HEEL OF HAND TO THE CENTER OF INFANT'S BACK DIRECTLY BETWEEN HIS/HER SHOULDER BLADES
- FLIP INFANT OVER SO THAT RESCUER'S FOREARM IS DOWN CENTER OF INFANT'S BACK
- PLACE HAND ON BACK OF INFANT'S HEAD FOR SUPPORT
- PLACE FOREARM ON OWN LEG TO POSITION INFANT'S HEAD LOWER THAN BODY TO ALLOW GRAVITY TO ASSIST IN DISLODGING THE OBJECT FROM THE AIRWAY
- USE OTHER HAND TO PROVIDE 5 CHEST THRUSTS USING TWO FINGERS
- CONTINUE THE COMBINATION OF BACK BLOWS & CHEST THRUSTS UNTIL:
 - THE OBSTRUCTION COMES OUT OR;
 - THE VICTIM BECOMES UNRESPONSIVE
- IF VICTIM BECOMES UNRESPONSIVE, LAY INFANT ON A HARD FLAT SURFACE
- TREAT AS AN UNCONSCIOUS CHOKING VICTIM AS DESCRIBED IN THE NEXT SECTION

Unconscious Choking:

Adult, Child & Infant:

- CHECK SCENE FOR SAFETY
- CHECK LEVEL OF CONSCIOUSNESS (LOC) OF THE VICTIM
- ACTIVATE EMERGENCY ACTION PLAN (EAP) & EMS
- PROVIDE 30 CHEST COMPRESSIONS (in same manner as CPR compressions on adult, child, infant respectively)
- OPEN AIRWAY (head tilt-chin lift, head tilt only for infants, or modified jaw thrust); CHECK FOR OBJECT IN MOUTH; PROVIDE FINGER SWEEP TO REMOVE OBJECT
- ATTEMPT A VENTILATION
- IF CHEST RISES:
 - CHECK PULSE
 - NO PULSE – START CPR
 - HAS PULSE BUT NO BREATHING – START RESCUE BREATHING
 - HAS PULSE AND IS BREATHING – AWAIT EMS & MONITOR VITAL SIGNS
- IF CHEST DID NOT RISE:
 - PROVIDE 30 CHEST COMPRESSIONS (in same manner as CPR compressions on adult, child, infant respectively)
 - OPEN AIRWAY (head tilt-chin lift, head tilt only for infants, or modified jaw thrust); CHECK FOR OBJECT IN MOUTH; PROVIDE FINGER SWEEP TO REMOVE OBJECT
 - ATTEMPT A VENTILATION
 - REPEAT THIS CYCLE UNTIL CHEST RISES

Recovery Position:

The recovery position can be used for a victim who is breathing but unresponsive. The benefits of this position are three-fold:

- 1.) Maintains open airway for the victim
- 2.) Allows fluids to drain from victim's mouth
- 3.) Prevents the victim from aspirating

HOW TO PLACE VCTM IN THE RECOVERY POSITION:

- EXTEND VICTIM'S ARM CLOSEST TO RESCUER ABOVE HIS/HER HEAD
- BEND VICTIM'S LEG FARTHEST FROM RESCUER OVER THE VICTIM'S OTHER LEG (leg closest to rescuer)
- WHILE PROVIDING SUPPORT TO VICTIM'S HEAD & NECK, PLACE VICTIM'S ARM FARTHEST FROM RESCUER ACROSS VICTIM'S CHEST
- ROLL VICTIM AS A SINGLE UNIT AWAY FROM YOU (to prevent bodily fluid from victim from contacting rescuer)
- USE THE VICTIM'S TOP BENT KNEE AS A SUPPORT AGAINST THE GROUND TO PREVENT VICTIM FROM ROLLING OVER ONTO HIS/HER CHEST/STOMACH

First Aid - Bleeding:

Controlling Bleeding:

Severe bleeding can be life-threatening. Controlling this bleeding and activating the EAP are crucial steps to prevent loss of life. There are three types of bleeding:

- 1.) **Capillary Bleeding** – typically, this type of bleed is not serious in nature. It is usually only oozing blood that can be controlled relatively easily.
- 2.) **Venous Bleeding** - There is large amount/volume of blood gushing from this type of wound. However, direct pressure can typically control this bleed.
- 3.) **Arterial Bleeding** - This is the most serious type of bleed. One loses a large amount/volume of blood in a relatively short amount of time.

HOW TO CONTROL BLEEDING:

- APPLY DIRECT PRESSURE TO THE WOUND WITH HEEL OF HAND
- ELEVATE BODY PART WITH WOUND ABOVE LEVEL OF HEART
- APPLY DIRECT PRESSURE WITH HEEL OF HAND TO PRESSURE POINT
- ACTIVATE EAP & EMS AS NEEDED

CONSIDERATIONS:

- ALWAYS USE GAUZE OR OTHER CLOTH (preferably white with no lint) ON THE WOUND WHILE APPLYING PRESSURE
- NEVER REMOVE BLOOD SOAKED GAUZE – ADD MORE ON TOP
- BE MINDFUL OF & CARE FOR SHOCK
- ALWAYS USE PPE

First Aid - Shock:

Shock can occur in many circumstances and is common when experiencing a traumatic event as well as during periods of severe blood loss. When a person is in shock his/her body does not have the ability to effectively circulate oxygen throughout the body to the vital organs.

HOW TO RECOGNIZE SHOCK:

- POOR CAPILLARY REFILL
- WEAKNESS & RESTLESSNESS
- CONFUSION & DIZZINESS (may seem intoxicated)
- SKIN IS COOL & MOIST TO THE TOUCH

HOW TO TREAT SHOCK:

- RECOGNITION OF EMERGENCY
- ENSURE SCENE IS SAFE
- ACTIVATE EAP & EMS
- KEEP VICTIM CALM & AS COMFORTABLE AS POSSIBLE
- DO NOT PROVIDE ANY FOOD OR DRINK
- RAISE LEGS APPROXIMATELY 6 INCHES (only if no spinal trauma suspected)

First Aid – Heat & Cold Related Emergencies:

Hypothermia:

This is a cold-related emergency and can be life-threatening. The victim's core body temperature has dropped below "normal" levels - typically below 95 degrees Fahrenheit (35 degrees Celsius). Generally speaking, there are three broad stages of hypothermia:

- 1.) **Stage I:** poor circulation; actively shivering; skin cold to the touch
- 2.) **Stage II:** slow weak pulse & slow breathing; irritable; lack of co-ordination & confusion
- 3.) **Stage III:** no pulse; no breathing

One should keep in mind that a person can become hypothermic even in "summertime" weather.

HOW TO TREAT HYPOTHERMIA:

- RECOGNIZE EMERGENCY
- MOVE VICTIM TO WARM AREA (i.e. indoors) – IF NOT POSSIBLE, SHIELD VICTIM FROM WINDS
- REMOVE ANY COLD & WET CLOTHING
- WRAP VICTIM IN DRY WARM BLANKETS, TOWELS, CLOTHING
- WHEN MOVING VICTIM, DO SO GENTLY
- IF VICTIM'S BREATHING BECOMES LABORED – ACTIVATE EAP & EMS
- IF VICTIM NOT BREATHING OR NO PULSE – PROVIDE RESCUE BREATHING AND/OR CPR

Hyperthermia:

This is a heat-related emergency and can be life-threatening. The victim's core body temperature has risen above "normal" levels - typically above 104 degrees Fahrenheit (40 degrees Celsius).

One should keep in mind that a victim suffering from hyperthermia should be cooled down as quickly as possible.

HOW TO RECOGNIZE HYPERTHERMIA:

- CONFUSION, DIZZINESS, HEADACHE, & NAUSEA
- ALTERED LEVELS OF CONSCIOUSNESS
- INCREASED PULSE RATE
- SKIN IS RED, HOT TO TOUCH, & MOIST OR DRY
- INCREASED OVERALL BODY TEMPERATURE

HOW TO TREAT HYPERTHERMIA:

- RECOGNIZE EMERGENCY
- MOVE VICTIM TO COOLER AREA (i.e. inside air conditioned area) – IF NOT POSSIBLE, MOVE VICTIM TO THE SHADE
- PLACE ICE PACKS IN 5 LOCATIONS ON THE VICTIM:
 - LEFT SHOULDER
 - RIGHT SHOULDER
 - LEFT ARMPIT
 - RIGHT ARMPIT
 - BACK OF NECK
- WRAP VICTIM IN COOL WET BLANKETS, TOWELS, CLOTHING
- IF VICTIM'S BREATHING BECOMES LABORED – ACTIVATE EAP & EMS

First Aid – Seizures:

HOW TO IDENTIFY A SEIZURE:

- ALTERED LEVELS OF CONSCIOUSNESS
- SHAKING UNCONTROLLABLY
- BODY IS RIGID OR STIFF
- FOAM OOZING FROM MOUTH/AIRWAY (only for certain types of seizures)

HOW TO TREAT A SEIZURE:

- ACTIVATE EAP & EMS IF SEIZURE LASTS LONGER THAN 5 MINUTES OR IF CAUSE IS UNKNOWN
- ALLOW SEIZURE TO OCCUR WITHOUT RESTRICTING VICTIM IN ANY WAY
- PLACE PILLOW OR BLANKET TO CUSHION THE VICTIM'S HEAD
- DO NOT PLACE ANYTHING IN THE VICTIM'S
- OPEN AIRWAY ONCE SEIZURE CONCLUDES; CHECK PULSE & BREATHING; PROVIDE APPROPRIATE CARE
- IF BREATHING BUT UNCONSCIOUS, PLACE IN RECOVERY POSITION

First Aid – Musculoskeletal Injuries:

The general rule of thumb is to stabilize a bone injury in the position found and not to splint an injury unless the victim is to be moved/transported.

HOW TO RECOGNIZE SOFT TISSUE INJURIES:

- PAINFUL WHEN BODY MOVES
- TENDERNESS
- SWELLING & BRUISING (minor)

HOW TO TREAT SOFT TISSUE INJURIES:

- R.I.C.E.
 - REST – rest the injured body part
 - ICE – ice the injured body part for 10-15 minutes each hour
 - COMPRESSION – wrap the injured body part/area with an ACE bandage
 - ELEVATION - elevate the body part/area above the level of the heart

HOW TO RECOGNIZE BONE INJURIES:

- UNABLE TO MOVE BODY PART
- DEFORMITY AT POINT OF INJURY
- TENDERNESS; SWELLING; BRUISING; GRATING SENSATION

HOW TO TREAT BONE INJURIES:

- STABILIZE THE INJURED BONE/JOINT/AREA
- ACTIVATE EAP & EMS AS NEEDED
- APPLY ICE TO LIMIT SWELLING

First Aid – Burns:

The general rule of thumb is to stabilize a bone injury in the position found and not to splint an injury unless the victim is to be moved/transported.

HOW TO IDENTIFY THE DEGREE OF A BURN:

- **First Degree:** pain with red swelled skin
- **Second Degree:** pain with white or red blistered skin; fluids oozing from burn site
- **Third Degree:** severe pain and/or numbness at and surrounding the burn site; skin is any combination of black, red, white, gray color; severe loss of bodily fluid from burn site

HOW TO TREAT BURNS:

- ATTEMPT TO STOP THE BURNING
- FLUSH & COOL THE BURNED AREA WITH WATER FOR NO LESS THAN 20 MINUTES
- COVER BURNED AREA WITH LOOSE STERILE DRESSING
- ACTIVATE EAP & EMS:
 - 1ST AND 2ND DEGREE BURNS
 - 3RD DEGREE CHEMICAL OR ELECTRICAL BURNS

First Aid – Poisoning:

Prevention of poisoning is the most important step. Medications should be stored in a locked cabinet and other dangerous solutions should be stored out of the reach of children.

HOW TO IDENTIFY A POISONING:

- NAUSEA & ACTIVE VOMITING
- LABORED BREATHING
- SEVERE ABDOMINAL CRAMPING
- ALTERED LEVELS OF CONSCIOUSNESS
- PROFUSE SWEATING
- SEVERE HEADACHE
- BURNS, STAINS OR OTHER MARKINGS AROUND MOUTH
- BURNING IN CHEST AND/OR THROAT
- OPEN MEDICINE BOTTLES, CLEANING PRODUCTS, OR INDUSTRIAL SOLUTIONS IN HOUSE AND/OR NEAR VICTIM

HOW TO TREAT A POISONING:

- ACTIVATE EAP & EMS
- CALL POISON CONTROL & ONLY FOLLOW THEIR DIRECTIONS

First Aid – Poisoning:

Prevention of poisoning is the most important step. Medications should be stored in a locked cabinet and other dangerous solutions should be stored out of the reach of children.

HOW TO IDENTIFY AN ASTHMA ATTACK:

- SHORTNESS OF BREATH
- WHEEZING
- RAPID AND/OR SHALLOW BREATHING
- INABILITY TO SPEAK, COUGH, OR MAKE NOISE
- BENDING OR LEANING FORWARD TO BREATHE
- BLUE LIPS & FINGERNAILS AND/OR POOR CAPILLARY REFILL
- SKIN MOIST TO THE TOUCH

HOW TO TREAT AN ASTHMA ATTACK:

- ACTIVATE EAP & EMS
- KEEP VICTIM CALM & IN COMFORTABLE POSITION
- ASK IF VICTIM (or family member) HAS AN INHALER

First Aid – Allergic Reaction:

Many allergic reactions are minor in nature and only impact certain body parts and/or systems. For example, skin, eye, and nose allergies are common and have little to no impact on larger body systems and are, typically, non-life threatening. On the other hand, there are some allergic reactions that can be severe enough to threaten one's life. Often times, these severe allergic reactions are referred to as Anaphylaxis and it requires immediate emergency care. One key sign that a person is suffering from Anaphylaxis is that he/she presents with multiple signs and symptoms from the list below and these signs and symptoms involve multiple parts of the body.

HOW TO IDENTIFY AN ALLERGIC REACTION:

- ITCHY EYES & NOSE
- RUNNY NOSE, SNEEZING & WATERING EYES
- RASHES AND/OR HIVES
- STOMACH CRAMPS AND MAYBE VOMITING AND/OR DIARRHEA
- REDNESS, SWELLING, & PAIN
- SWELLED TONGUE, WHEEZING & THROAT CLOSING
- CHEST TIGHTNESS
- LABORED BREATHING AND/OR RESPIRATORY ARREST

HOW TO TREAT AN ALLERGIC REACTION:

- PROVIDE ANTIHISTAMINE BY MOUTH (i.e. Benadryl)
- MONITOR AIRWAY & BREATHING
- IF ANAPHYLAXIS IS SUSPECTED:
 - ACTIVATE EAP & EMS
 - MONITOR VITAL SIGNS (pulse and breathing)
 - ASK VICTIM (and/or family members and friends) IF HE/SHE HAS AN EPI-PEN
 - ASST IN ADMINISTERING EPI-PEN:
- REMOVE SAFETY CAP
- PLACE EPI-PEN IN VICTIM'S HAND
- INSTRUCT VICTIIM TO HOLD EPI-PEN WITH TIP POINTED DOWN TOWARD HIS/HER UPPER LEG/THIGH (all while holding the victim's hand to help guide the epi-pen)
- EPI-PEN POINTED TIP SHOULD BE PUSHED FIRMLY INTO THE UPPER THIGH UNTIL IT CLICKS
- HOLD EPI-PEN IN PLACE FOR 3 SECONDS
- PULL EPI-PEN STRAIGHT UP & OUT OF THIGH
- RUB AREA FOR 10 SECONDS TO HELP ABSORB INTO THE MUSCLES

Special Scenarios – Chapter 10

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

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.

Shallow Water Line Search

The lifeguard(s) must activate the EAP and initiate a line search when a submerged victim: cannot immediately and easily be seen by the lifeguard(s) from the pool deck (or his/her assigned post); submerges while the lifeguard(s) is/are responding and approaching the victim and the lifeguard(s) cannot immediately and easily be seen by the lifeguard(s); slips under the water with only bystander(s) witnessing the submersion; slips under the water without the lifeguard or any other bystander witnessing the submersion.

A shallow water line search is utilized when a victim slips below the surface of the water at a depth in which lifeguard(s) can easily walk and the bottom is not visible.

Either the lifeguard who saw this occur or the primary lifeguard who is communicating with the bystander who saw the victim slip under the water, should immediately attempt to triangulate the victim's last known position. To accomplish this, the lifeguard should:

- Make a visual note of the victim's last known position prior to submerging.
- Quickly identify:
 - a stationary object beyond this position;
 - a stationary object that is perpendicular to this position and;
 - a stationary object that is behind you, the rescuer, on the shoreline.
- These three objects relative to the victim's last known position will allow you to maintain a marking of the depth and/or distance from the shoreline of the victim's last known position as well as the being able to maintain the victim's last known position relative to the position of the lifeguard line search in the water.
- As additional lifeguards arrive on scene, they will each enter the water, forming a line in which they are arm's length apart from the lifeguard on either side – to ensure this distance is maintained throughout the search, the lifeguards can interlock arms.
- The most senior lifeguard in the water will be the primary rescuer responsible for directing the search line and will communicate directly with the lifeguard onshore.
- The line should begin either up current or up wind from the victim's last known position; the shortest person must be in the shallowest of the water and the tallest person in the deepest part of the water with no person ever being deeper than chest deep; the line should begin to walk in the direction of the victim's last known position with each person in the line sweeping his or her feet left to right and right to left across the bottom in an effort to feel and locate the victim; the line moves at the pace of the slowest walking person.
- The line search must continue in a back-and-forth fashion across the water until the victim is located.

Deep Water Line Search

Either the lifeguard who saw this occur or the primary lifeguard who is communicating with the bystander who saw the victim slip under the water, should immediately attempt to triangulate the victim's last known position. To accomplish this, the lifeguard should:

- Make a visual note of the victim's last known position prior to submerging.
- Quickly identify:
 - a stationary object beyond this position;
 - a stationary object that is perpendicular to this position and;
 - a stationary object that is behind you, the rescuer, on the deck.
- These three objects relative to the victim's last known position will allow you to maintain a marking of the depth and/or distance from the shoreline of the victim's last known position as well as the being able to maintain the victim's last known position relative to the position of the lifeguard line search in the water.
- As additional lifeguards arrive on scene, they will each enter the water with mask and fins, forming a line in which they are arm's length apart from the lifeguard on either side.
- The most senior lifeguard in the water will be the primary rescuer responsible for directing the search line and will communicate directly with the lifeguard on deck.

- The line should begin either up current or up wind from the victim's last known position; the shortest person must be in the shallowest of the water and the tallest person in the deepest part of the water; the line should begin by performing a head-first surface dive to the bottom and taking the number of underwater swim strokes as preassigned by the primary rescuer in the direction of the victim's last known position with each lifeguard in the line sweeping his or her hands, arms and feet left to right and right to left across the bottom and through the water column and visually looking through the water all in an effort to locate the victim; lifeguards should resurface in an upright position once he or she has completed the preassigned number of underwater swim strokes; once all lifeguards have resurfaced, the primary rescuer moves the line to the lifeguard who is farthest back.
- The line search must continue in this same pattern across the water until the victim is located; the search is taken over by local EMS services; or the search is terminated by local EMS services.

It is vital that any time lifeguards are submerged in the water, for any reason, that at least one Marker Buoy is used to notify nearby boat traffic of persons under the water's surface.

Locating Submerged Victim

- If the victim is located by lifeguards during a line search – deep or shallow water – he or she must immediately be brought to the surface of the water. Lifeguard(s) should accomplish this by any means necessary with the most desired technique being one in which the victim is grasped under each armpit by one or more lifeguards.
- Once at the surface, the victim should be kept on his or her back while ensuring his or her face is clear of the water. The lifeguards should work as a team to move the victim to safety (i.e. deck) as quickly and efficiently as possible. Once on the deck, the victim should be assessed and the appropriate emergency care provided based on the victim's condition.

Chapter Ten 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 – Skills Assessment Form (SAF)

Skills Assessment Form (SAF) | Swim Safety for Coaches

COACH NAME: _____

	Skill	Met Standard	Did Not Meet Standard	Notes:
	In-Water Emergencies:			
A.	Entries:			
1.	Walking Entry			
2.	Dash Entry (zero depth)			
3.	Slip Entry			
4.	Cannonball Entry			
5.	Scissor Entry			
6.	Feet First Dive Entry			
7.	Shallow Dive Entry/Head First Surface Dive			
B.	Approaches to Victim:			
1.	While wearing rescue tube high across chest, swim front stroke to victim			
2.	While wearing rescue tube & allowing it to trail, swim front stroke to victim			
3.	While wearing rescue tube & allowing it to trail, walk in shallow water to victim			
C.	Escapes From a Victim:			
1.	Frontal Hold Escape Method			
2.	Rear Hold Escape Method			
D.	Water Assist for Victim:			
1.	Walk Assist			
2.	Reaching Assist with No Equipment			
3.	Reaching Assist with Rescue Tube			
4.	Reaching Assist with Reaching Pole			
5.	Tossing Assist with Ring Buoy			
E.	Removing Victim from Water			
1.	Drag Assist			
2.	Carry Assist			
3.	Quick Extract with Backboard			
4.	Stabilized Removal (see Spinal Trauma)			
	Spinal Trauma			
F.	In-Line Stabilization			
1.	Arm Splints – Face Up Victim			
2.	Arm Splints & Roll - Face Down Victim			
3.	Arm Splints – Submerged Victim			
4.	Head-Chin-Chest Grip – Face Up Victim			
5.	Head-Chin-Chest Grip & Roll – Face Down Victim			
6.	Head-Chin-Chest Grip – Submerged Victim			
G.	Spineboard			
1.	Vertical Spineboarding – On Land			
2.	Spineboarding – Shallow Water			
3.	Spineboarding – Deep Water			
4.	Spineboarding – Zero Depth			
5.	Spineboarded Victim Removal from Pool			
H.Exam	Written Exam			

Appendix C – Lifeguard Equipment

Pool lifeguards use a range of specialized equipment to ensure the safety of swimmers and to perform rescues and first aid as needed. Here's a detailed list and description of the primary equipment used by pool lifeguards:

I. Rescue Tube (Lifeguard Tube)

- **Description:** A long, buoyant foam tube covered in vinyl or nylon with adjustable shoulder straps and clip ends.
- **Purpose:** Used to assist in-water rescues by keeping both the rescuer and the victim afloat. It allows lifeguards to tow victims to safety while minimizing the risk of contact injury or drowning.

2. First Aid Kit

- **Description:** A comprehensive kit containing medical supplies such as bandages, antiseptics, CPR masks, gauze, gloves, burn treatment, scissors, tweezers, and more.
- **Purpose:** Used to administer immediate first aid for minor to serious injuries before emergency services arrive.

3. Automated External Defibrillator (AED)

- **Description:** A portable electronic device that analyzes heart rhythms and can deliver an electric shock to a person in cardiac arrest.
- **Purpose:** Vital in resuscitating someone experiencing sudden cardiac arrest. Most AEDs provide voice prompts to guide the rescuer.

4. CPR Resuscitation Mask (Pocket Mask)

- **Description:** A compact, reusable barrier device used during rescue breathing and CPR. Some include a one-way valve.
- **Purpose:** Protects both rescuer and victim from cross-contamination while allowing effective ventilation during CPR.

5. Lifeguard Uniform

- **Description:** Typically includes a red swimsuit, shorts, and a shirt or rash guard labeled "LIFEGUARD", plus a whistle and hat.
- **Purpose:** Distinctive and functional apparel that helps identify lifeguards quickly. Designed for mobility and exposure to sun and water.

6. Backboard (Spinal Board)

- **Description:** A rigid board with straps and head immobilizers, used to secure and transport individuals with suspected spinal or neck injuries.
- **Purpose:** Essential in suspected head, neck, or spinal trauma, especially from diving accidents or hard water entries.

7. Whistle

- **Description:** A loud, high-pitched whistle typically attached to a lanyard.
- **Purpose:** Used for crowd control, signaling other lifeguards, or alerting swimmers to hazards or rule violations.

8. Polarized Sunglasses

- **Description:** Glasses with lenses that reduce glare from water surfaces.
- **Purpose:** Improve visibility into the water on sunny days, reducing eye strain and allowing better observation of swimmer activity.

9. Umbrella or Lifeguard Stand Shade

- **Description:** A large umbrella or canopy used to provide shade to the lifeguard stand.
- **Purpose:** Prevents heat exhaustion or sunburn during long shifts in the sun.

10. Two-Way Radios / Communication Devices

- **Description:** Waterproof radios or headsets.
- **Purpose:** Allows lifeguards to communicate with each other or facility staff instantly, especially in emergencies.

11. Personal Protective Equipment (PPE)

- **Description:** Includes gloves, masks, eye protection, and gowns (especially post-COVID).
- **Purpose:** Protects lifeguards when administering first aid or dealing with blood, vomit, or other bodily fluids.

12. Lifeguard Stand (Chair or Tower)

- **Description:** A lifeguard stand is an elevated seat or platform, typically 5–10 feet above the pool deck. It may be portable or fixed and often includes an umbrella, shade canopy, rescue equipment hooks, and foot platforms.
- **Purpose:** The lifeguard stand provides **an elevated vantage point**, allowing lifeguards to **see the entire pool area clearly**, including underwater movement and signs of distress. Being raised helps eliminate visual obstructions and reduce glare from the water surface.

I3. Rescue Fins (optional, usually in large pools)

- **Description:** Swim fins worn on the feet.
- **Purpose:** Increases swimming speed and efficiency during in-water rescues. Rare in small pool settings but useful in large pools or open water.

I4. Incident Report Forms / Clipboard

- **Description:** Paperwork used to document rescues, injuries, or policy violations.
- **Purpose:** Ensures accurate record-keeping for legal and safety review purposes.

Appendix D – Final Exam



P.O. Box 311 Riderwood, MD 21139 USA P: 1-800-484-0419 E: admin@lifeguardcertifications.com W: lifeguardcertifications.com

Final Exam | Swim Safety for Coaches

1. What is the coach's primary safety responsibility during swim practice?

- A. Writing workouts
- B. Monitoring lifeguard rotation
- C. Ensuring the safety and supervision of all swimmers
- D. Timing races

2. Before starting practice, the coach should:

- A. Allow swimmers in while checking email
- B. Confirm a certified lifeguard is on duty and inspect the pool area
- C. Have swimmers test the water temperature
- D. Ask swimmers to begin warm-up independently

3. A lifeguard must be present:

- A. Only during meets
- B. Only for youth practices
- C. Any time swimmers are in the water
- D. Only if the coach is not certified in first aid

4. Which of the following is part of a facility's Emergency Action Plan (EAP)?

- A. Meet warm-up procedures
- B. Location of emergency exits and response roles
- C. Team travel itinerary
- D. Lap lane assignments

5. If a swimmer experiences a head injury in the pool, the coach should:

- A. Let them finish practice if they feel okay
- B. Immediately remove them and call emergency personnel
- C. Wait and observe for 10 minutes
- D. Apply ice and return them to swimming

6. Coaches should position themselves during practice so they can:

- A. Write notes and avoid distractions
- B. Rest and let the team lead itself
- C. Maintain clear sightlines of all swimmers in the water
- D. Chat with parents during the session

7. Diving should be allowed only when:

- A. Water is deeper than 5 feet and supervised
- B. Swimmers request it
- C. There's enough space in the lane
- D. The pool is empty

8. During a lightning storm at an outdoor practice, coaches should:

- A. Tell swimmers to keep going unless thunder is loud
- B. Move practice to the shallow end
- C. Immediately clear the water and move everyone indoors
- D. Let swimmers finish their set

9. If a swimmer shows signs of hypothermia during an open water event, the coach should:

- A. Encourage them to keep moving
- B. Pull them from the water and seek medical help
- C. Give them hot coffee
- D. Have them float until they feel better

10. In an open water event, swimmers should signal distress by:

- A. Screaming loudly
- B. Waving both arms in the air
- C. Raising one arm and floating on their back
- D. Swimming back to shore fast

11. Coaches are expected to:

- A. Prioritize winning over safety
- B. Supervise swimmers even outside the water
- C. Delegate safety entirely to lifeguards
- D. Let swimmers self-monitor injuries

12. The most appropriate way to respond to a spinal injury is to:

- A. Move the swimmer to the side of the pool quickly
- B. Support the head and neck and keep the swimmer still
- C. Sit them up and ask questions
- D. Lift them out of the pool

13. What is the best reason for pre-meet warm-up lane assignments?

- A. To limit athlete confusion
- B. To ensure each team has time to socialize
- C. To prevent overcrowding and reduce collisions
- D. To separate age groups

14. Proper coach-to-athlete ratios are important because:

- A. They help determine practice pace
- B. They allow for better stopwatch use
- C. They ensure swimmers are adequately supervised
- D. They help coaches organize relays

15. Why should swimmers wear bright-colored swim caps in open water events?

- A. To identify their lane
- B. To improve aerodynamics
- C. For visibility by rescue personnel
- D. To match their team colors

16. The Emergency Action Plan should be reviewed:

- A. At the start of each season and before major events
- B. Only if there is a prior incident
- C. When required by insurance
- D. Annually by the head coach only

17. Which of the following is a *sign* of swimmer distress?

- A. Loud splashing and waving
- B. Floating calmly
- C. Moving quickly through the water
- D. Smiling and talking

18. If a swimmer fails to check in after an open water race, the coach should:

- A. Wait a few minutes
- B. Assume they left early
- C. Notify event staff and initiate a search
- D. Text the swimmer

19. Emergency drills should be conducted:

- A. Only after an incident
- B. Once per year
- C. Regularly with staff and team to reinforce preparedness
- D. By lifeguards only

20. Which condition may require immediate removal from the water?

- A. Swimmer sneezes
- B. Muscle cramp
- C. Disorientation or confusion
- D. Sunburn

21. A coach notices a swimmer repeatedly holding their side and slowing down. What should they do?

- A. Ignore it—probably a cramp
- B. Tell them to push through
- C. Remove the swimmer and assess for injury or illness
- D. Ask another swimmer to assist

22. Who has ultimate authority over the pool during an emergency?

- A. Head coach
- B. Timer
- C. Lifeguard
- D. Team captain

23. Coaches should enforce safety policies:

- A. Only during high-risk sets
- B. When the head coach is present
- C. At all times, regardless of practice intensity
- D. Only when lifeguards are off-duty

24. What should a coach do if the pool deck becomes slippery?

- A. Block it off and notify facility staff
- B. Tell swimmers to walk carefully
- C. Wait until someone falls before reacting
- D. Cancel practice

25. When supervising swimmers, a coach should:

- A. Use their phone only when necessary
- B. Watch from the office
- C. Stay present, alert, and avoid distractions
- D. Let team captains handle discipline

Appendix E – Final Exam Answer Key

Swim Safety for Coaches – Final Exam Answer Key

Question	Correct Answer
1	C – Ensuring the safety and supervision of all swimmers
2	B – Confirm a certified lifeguard is on duty and inspect the pool area
3	C – Any time swimmers are in the water
4	B – Location of emergency exits and response roles
5	B – Immediately remove them and call emergency personnel
6	C – Maintain clear sightlines of all swimmers in the water
7	A – Water is deeper than 5 feet and supervised
8	C – Immediately clear the water and move everyone indoors
9	B – Pull them from the water and seek medical help
10	C – Raising one arm and floating on their back
11	B – Supervise swimmers even outside the water
12	B – Support the head and neck and keep the swimmer still
13	C – To prevent overcrowding and reduce collisions
14	C – They ensure swimmers are adequately supervised
15	C – For visibility by rescue personnel
16	A – At the start of each season and before major events
17	A – Loud splashing and waving
18	C – Notify event staff and initiate a search
19	C – Regularly with staff and team to reinforce preparedness
20	C – Disorientation or confusion
21	C – Remove the swimmer and assess for injury or illness
22	C – Lifeguard
23	C – At all times, regardless of practice intensity
24	A – Block it off and notify facility staff
25	C – Stay present, alert, and avoid distractions

Appendix F – Course Outline

Swim Safety for Coaches Course Outline

Lesson	Objective(s) and/or Physical Skills	
	Content/Knowledge	Skills
Chapter #1 Introduction & Expectations	<ul style="list-style-type: none"> • Professionalism • Safe Environments • Legal Information • Purpose of Lifeguard 	
Chapter #2 Personal Protective Equipment	<ul style="list-style-type: none"> • Gloves • Bloodborne Pathogens • Disposal of Contaminated Materials • Cleanups 	Perform skill demonstrations <ul style="list-style-type: none"> • Removal of Gloves
Chapter #3 Risk Management & Safety	<ul style="list-style-type: none"> • Prevention • Inclement Weather • Pool Chemicals & Pump Rooms • Facility Safety • Pool Rules • Voluntary Hyperventilation • EAP's • Communication 	
Chapter #4 Drowning Process	<ul style="list-style-type: none"> • Drowning Statistics • What is Drowning • Causes of Drowning 	
Chapter #5 Swimmer & Swim Meet Safety	<ul style="list-style-type: none"> • Overall Swimmer Safety • Meet & Practice Safety Best Practices 	
Chapter #6 Surveillance, Scanning, Zones of Coverage & Recognition	<ul style="list-style-type: none"> • Proper Surveillance • Scanning Techniques • Types of & Zones of Coverage • Recognizing Signs & Symptoms of distress in the Water 	Perform skills demonstrations (see Swim Safety for Coaches Skills Assessment Form)
Chapter #7 In-Water Emergencies	<ul style="list-style-type: none"> • 1 • Reaching Assists • Tossing Assists 	Perform skills demonstrations (see Swim Safety for Coaches Skills Assessment Form)
Chapter #8 Spinal Trauma	<ul style="list-style-type: none"> • Recognition – Signs & Symptoms • Manual In-Line Stabilization Techniques • Various Backboarding Scenarios 	Perform skills demonstrations (see Swim Safety for Coaches Skills Assessment Form)
Chapter #9 CPR/AED/First Aid	<ul style="list-style-type: none"> • All Ages CPR • Use of AED • Various First Aid & Emergency Treatment Techniques 	Perform skills demonstrations (see CPR/AED/First Skills Assessment Form)
Chapter #10 Special Scenarios	<ul style="list-style-type: none"> • One Guard Facilities • Victim Searches 	
Final Written Exam	Demonstrate content knowledge.	
Performance of Skills	Demonstrated throughout the course & prerequisites.	

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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.



**World Academy of
Safety & Health**



**Corporate Headquarters Address:
1209 Mountain Road, PL NE Ste R
Albuquerque, NM 87110 U.S.A.**

**Billing/Mailing/Shipping Address:
P.O. Box 311 Riderwood, MD 21139
U.S.A**

E: admin@lifeguardcertifications.com

Ph: 1-800-484-0419

W: LifeguardCertifications.com

