

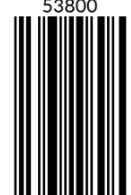


World Academy of
Safety & Health

Waterpark Lifeguard Student Manual, v.2021

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Waterpark Lifeguard – Student Manual, v.2021

Purpose:

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

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Disclaimer

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

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 *Waterpark Lifeguard Student Manual, v.2021* must not replace or substitute for advanced medical care or emergency services response and treatment. Further, no information contained within this *Student Manual, v.2021* 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, Waterpark Lifeguards, Surf Rescue Lifeguards, Lifeguard Instructors, and Lifeguard Supervisors.

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

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

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

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

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

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Purpose of Certification and Training Course

The purpose of the World Academy of Safety & Health (WASH) Waterpark Lifeguard Curriculum and Certification program is to provide the participant(s) with the confidence, content knowledge, and physical skills to recognize, respond, and recover in the event of an emergency in or around a waterpark and the various water-related features and rides within the waterpark setting.

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 waterpark facility.

This course is not designed to train lifeguards to supervise other lifeguards. In order to provide lifeguard supervision, successful completion of a management or supervisory course is necessary.

All course participants have electronic access (using the student login on lifeguardcertifications.com) to course manuals, course slide presentations, and course skills video clips beginning with class registration and until the expiration date on the WASH certificate.

Certification Policies & Procedures

Provider-Level Course Prerequisites

Prior to the start of the course participants:

- Must be, at minimum, fifteen (15) years of age by the final meeting date of the course to be eligible to enroll.
- Must successfully demonstrate the course's pre-requisite physical skills:
 - Swim 300 yards using only front crawl or breaststroke without resting. This is an untimed event.
 - Tread water using only one's legs for two (2) minutes.
 - Swim twenty-five (25) yards, dive to a depth between six (6) feet and twelve (12) feet to retrieve a ten (10) pound weight, return to the surface, swim twenty-five (25) yards back to the starting point while keeping the ten (10) pound weight above the water's surface. The participant must exit the pool without use of stairs or steps with the 10-pound weight in hand. Each participant will have a maximum of 1 minute and 40 seconds to complete this prerequisite skill.

Requirements for Successful Completion of Provider-Level Waterpark Lifeguard Course

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

- Hold a current, verifiable World Academy of Safety & Health (WASH) Pool Lifeguard certificate.
- Must be present for all class meetings. This includes but may not be limited to classroom sessions, pool sessions, another in-person sessions.
- Must meet the course objective for each lesson by successfully demonstrating each required physical skill.
- Must earn a minimum score of eighty (80) percent on the final proctored written exam.

Certification Period for Provider-Level Course

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

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

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

Certification Renewal Requirements for Prover-Level Course

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

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

Course Design

Course Overview:

The WASH Waterpark Lifeguard training course is intended for individuals who will seek employment as a lifeguard at a waterpark facility with special waterpark features such as lazy rivers, waterslides, wave pools, diving boards, splash pads and other play features, and any other water features. There are several course pre-requisites that can be found in Section I of Policies & Procedures.

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

Program & Curriculum Structure:

Waterpark Lifeguard training is a World Academy of Safety & Health (WASH) specialty course.

Pre-Requisite(s):

Any person wishing to earn the WASH waterpark lifeguard certificate must successfully complete the World Academy of Safety & Health (WASH) pool lifeguard core course in addition to this specialty course (with exceptions being given to Lifeguard Instructors currently holding a valid certificate from another certifying agency recognized by WASH).

Once the pool lifeguard training is successfully completed, participants will have the option to add additional *Units of Study* to earn additional specialty certificates that, in addition to waterpark lifeguard, can include:

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

Delivery Methods:

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

Evaluation of Participants

Formal Evaluation of Required Physical Skills:

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

Formal Evaluation of Content Knowledge:

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

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

Certification:

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

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

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

Introduction to Waterparks – Chapter I

OBJECTIVE(S): 1. Identify the special features within a waterpark; 2. Identify the characteristics of each of these waterpark features.

Waterparks have special features that require additional training for lifeguards in the use of the proper and most effective techniques and preventative measures to ensure patron safety in the waterpark setting. It is important to note that as the aquatics industry continues to evolve, there will likely be new features designed and introduced into waterparks across the world. As an industry, we will need to remain flexible and open to new learning when it comes to providing proper lifeguarding for these new features.

Waterparks have special features not seen at standard swimming pools. These features can include any combination of the following:

Diving Boards

The depth of diving pools can vary and depends on the height of the diving board or boards at the facility. Typically, the pool depth is 4 meters (13.12 feet) when there is a springboard and/or a 5 meter platform and the pool depth is 5 meters (16.40 feet) if there is a 10 meter platform.

Spring Board: springboards are flexible and have hinges on the end attached to the pool deck. These diving boards can be 1 meters or 3 meters above the surface of the water. Modern springboards use aircraft-grade aluminum in their construction and have an epoxy resin on the board's surface to create a slip-resistant surface. Additionally, these springboards have, what is called, a fulcrum located halfway between the board's attachment on the pool deck and the end of the board over the water. This fulcrum is adjustable and is used to tighten (or loosen) the board.

High Dives and Platforms: platforms are stationary diving structures that can be 5 meters, 7 meters and 10 meters in height and are built into a diving "tower". These platforms and structures, typically, utilize concrete in their construction. Often times, they have a mat on the platform's surface to prevent divers from slipping.

Waterslides

There are several types of waterslides all with their own unique features and characteristics which require the lifeguard(s) to be familiar with and know how to react to emergencies on each type of slide at the facility he or she will be working.

Kiddie Slides: these slides all share similar characteristics in that they are slow riding, not too tall or steep, empty into a very shallow catch pool that is, typically no deeper than a few inches. These slides can be free-standing or they can be, in some facilities, attached to or a part of another structure or splash pad area. It is not uncommon for these types of slides to either mounted to the pool deck or be part of the mold of the pool's wall.

Tube Slides: as the name implies, users sit a top or inside a tube while descending the slide. The profile of these slides is u-shaped and they are open to the air on the top of the slide. Typically, these slides have high walls to prevent users from leaving the slide while descending.

Mat or Pad Slides: riders use a foam or PVC mat to sit on as he/she descends the slide. These slides may have a single lane or, as is usually the case, have multiple lanes and accommodate multiple riders at one time. They are not usually steep slides.

Speed Slides: riders descend at high rates of speed in or on a slide that is typically steep, narrow and straight down from the starting point to the rider release point. These slides are between 75 feet and 300 feet in length and can be open or an enclosed body slide.

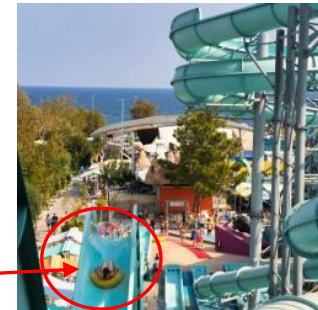
Drop Slides: riders are plunged into a deep area of the catch pool from a height. These slides are of a simple design and do not require a tremendous amount of space within the facility to install. They can and are easily added to existing pools who need to conserve space and money.



The drop slide into the “catch pool”.
FIGURE C.1.1



Rafting Slides: riders descend the slide on top of or inside a raft. The slides and, subsequently, the rafts can be a variety of sizes to accommodate a single rider or a family of riders all in one raft. The slide itself can contain multiple features that include areas that are open, closed, curves and changes in elevation with the slide transitioning multiple times between uphill and downhill patterns.



A raft slide with single riders on a tube descending the feature.

FIGURE C.1.2



Serpentine Slides: the single characteristic that sets these slides apart from the other types of slides is the fact that they constantly twist and change directions. The changes of direction are a result of a series of sharp twisting curves in the slide.

Lazy Rivers

Lazy river features are shallow, long winding pools in which water moves in a single direction at between 1-3 miles per hour (mph) which equates to about 2-3 feet per second. These pools are “closed” features meaning that there is no distinct starting or ending point. Instead, users are able to enter and exit the water in multiple locations along the pools’ route. In some cases, only users on rafts or inner tubes are permitted in this type of pool while in other facilities, users with or without rafts are permitted to utilize these pools.

Wave Pools

These swimming pools have artificially or mechanically generated waves which can be similar to those found in open tidal water environments. These pools are narrower at the back where the waves are generated as compared to the front of the pool where the water meets the “beachfront”.

There are various entry and exit points within a wave pool that can include: ladders on the side walls of the pool and zero entry along the shallowest portion of the pool or “beachfront”.

One specialty type of wave pool growing in popularity is the surf pool. They are specifically designed for the sport of surfing and there are no other users in these pools. The waves being generated have also been designed to create the best experience for those wanting to surf.

Play Features, Spray Pools and Splash Pads

Based upon the exact play structures, water depth and other factors within these features, lifeguards may or may not be required.

Play Features: these structures usually include a few different features within the larger structure. For example, within a play feature one may find small kiddie waterslides; very shallow kiddie pools; and small spray nozzles either in the raindeck itself or above the ground.

Spray Pools and Splash Pads: Typically, these types of features have little to no depth or standing water associated with them. These features include: spray nozzles in the raindeck that propel water upwards into the air; spray nozzles above the ground; movable spray nozzles; and shower features in various shapes that drop water onto users. The floor of these features is usually composed of non-slip rubber.

Preventative Lifeguarding – Chapter 2

OBJECTIVE(S): 1. Explain the need for operating procedures; 2. Detail what must be included in the facility's operating procedures; 3. Identify overall standard waterpark rules; 4. Identify ride or feature specific waterpark rules; 5. Explain site specific waterpark rules; 6. Identify what and where flotation devices are permitted, disallowed, and/or required; 7. Explain what an EAP for a waterpark must include; 8. Explain the purpose of facility inspections and audits; 9. Detail what should be inspected and what follow-up is required; 10. Explain the benefits of internal and external audits of the facility.

Operational Protocols

These protocols are designed to mitigate risk and provide for an overall safer environment throughout the waterpark for guests, colleagues, vendors and anyone else visiting the facility. There should be broad operating protocols that govern the overall waterpark and there should also be ride or feature-specific operating protocols that govern each feature or ride within the waterpark.

The operating protocols should be: posted in a location for all staff to easily see and access them; available at each ride or feature; included in staff and facility handbooks. Additionally, the ride or feature-specific operating protocols should be available to all staff members and should, at a minimum, provide an overview of:

- Rules & Signage for the Feature
- Staffing & Training
- Safety Protocols & Rider Requirements
- Inspections & Audits
- Emergency Action Plan & Flow of Water

Rules and Regulations

Similar to the operating protocols, there should be rules for the overall safe operation of the waterpark and there should be ride or feature-specific rules that go above and beyond or into greater detail than the standard set of facility rules.

The overall facility rules should be prominently posted at all facility entrances; high traffic areas within the waterpark; all ticket windows; and dispatch areas of waterslides and other rides or features.

The ride or feature-specific rules should be prominently posted at the entrance to each respective feature. These rules must include safe use directions for each specific ride or feature. At a minimum, they must include:

- Height requirements
- Weight requirements
- Positioning of users on the ride/feature
- Rafts required or prohibited between users
- Age requirements
- Clothing requirements or prohibitions
- Timing, space & distance requirements

It is important that the established broad rules for the waterpark as well as each ride or feature within the waterpark originate from:

- Manufacturer's recommendations
- Industry standards, best practices, and recommendations
- Facility specific rules and guidelines

Personal Flotation Devices

Rules related to personal flotation devices within a waterpark will likely be varied from one ride or feature to another. For example, some rides will require personal flotation devices for users of a particular age, height and weight. Other rides will not permit the wearing of personal flotation devices for any users.

Waterpark managers should check local laws as some may require use of lifejackets throughout the waterpark and/or on particular rides or features within a waterpark. When and if required, it is important for waterpark facilities to provide staff proper training on the use of and sizing of lifejackets. It is equally important to properly maintain the lifejackets ensuring they will continue functioning properly.

Lifejacket/Personal Flotation Devices used for specific rides or features within a waterpark.

FIGURE C.2.1



EAP's, Risk Inspections & Audits

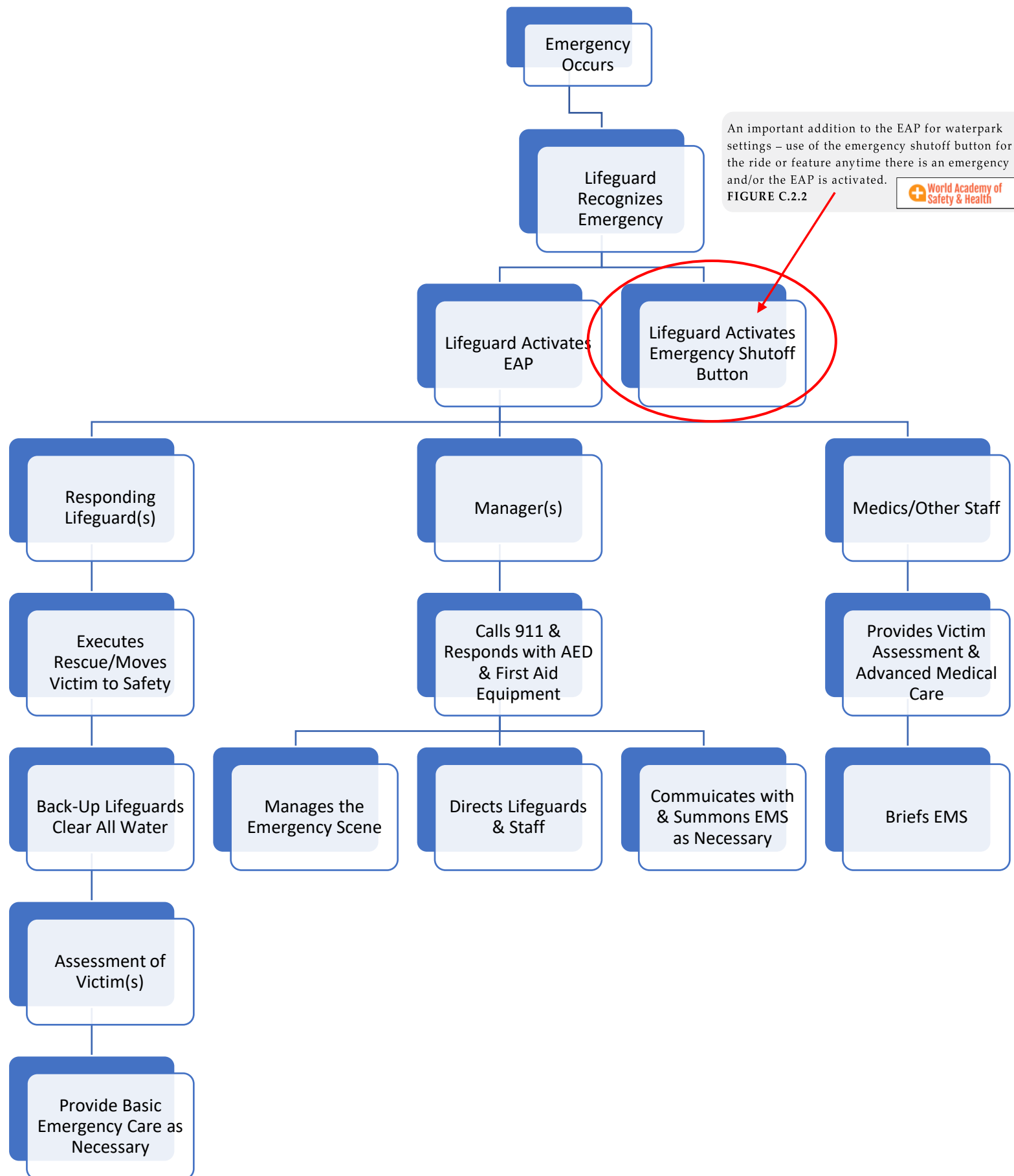
During in-service training, waterpark management should routinely review and practice the facility's Emergency Action Plan (EAP) with all employees. All waterpark facilities should also conduct daily inspections and regular internal audits to mitigate risk.

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.

Facility inspections should occur, at a minimum, on a daily basis prior to opening. The inspection must include: rescue equipment, first aid supplies and equipment, each ride and feature within the facility, the unguarded areas such as the pool decks and pump rooms, and pool water quality. The purpose of these daily inspections is to identify items and/or areas that may pose a risk to patrons and/or employees. Any issue with rescue equipment, a lack of first aid supplies, unsafe condition with a ride or feature, and/or other unsafe area(s) must be documented and immediately reported. The facility should not open to swimming until and unless all equipment is stocked and in good working condition and all deck conditions are safe for use.

The facility should provide a daily checklist for the purpose of daily inspections. The completed checklists should be consistently and accurately completed and kept on file in the facility's office. Even with an inspection occurring at the start of each day, lifeguards and other staff must remain vigilant throughout the day to identify anything out of the ordinary with each ride or feature as problems may develop during the course of the daily operation.



Patron Surveillance & Scanning in the Waterpark Setting – Chapter 3

OBJECTIVE(S): 1. Explain the variety of dangers and special operational considerations at waterparks; 2. Explain how best to mitigate the risks within waterparks; 3. Identify the various communication techniques and when and how each should be utilized; 4. Identify the challenges to effective surveillance and scanning in a waterpark setting; 5. Explain the positioning of lifeguard stations within a waterpark; 6. Explain when and how individual lifeguards should reposition him/herself to maintain effective surveillance; 7. Detail the steps of an effective and safe lifeguard rotation in the waterpark setting.

Dangers and Special Operational Considerations

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. The rides and features found in many waterparks present unique challenges for lifeguards – most features require multiple lifeguard stations. Waterslides must have a lifeguard at the top of the slide (dispatch area), at least one lifeguard in the catch pool and possibly additional lifeguards at exit points. Additionally, many users may quickly become scared, panicked, dizzy, and/or unsure of him or herself while in, on or around certain waterpark rides and features. For example, wave pools do not constantly produce waves. When waves are going to be produced, typically a noise signals patrons that wave action is about to commence. This will send some running to exit the pool. During this time, lifeguards must pay special attention to those attempting to exit the pool, those remaining in the pool, and those who may become disoriented or otherwise require assistance once the wave action begins.

To mitigate these impacts and to be able to effectively respond when needed, the following areas should be closely monitored:

- Time and space intervals
- Steps/stairs to the dispatch area or slide entrance
- Slides, particularly raft slides, for users who may have fallen off the mat or raft
- Catch pools, wave pools and lazy river entry points
- Collisions between users; between users and the slide; between users and the terminus
- Catch pools, wave pools and lazy river exit points

Statistically, most injuries in waterparks are a combination of accidents that occur on or around waterslides and slips and falls on wet surfaces – a combined 78.1% of all injuries occurring inside waterparks. According to a study conducted by staff at Akdeniz University,

In water park injuries, while children suffer especially head and maxillofacial trauma, extremity and spinal injuries are frequent in the adult group. Unless sufficient and required safety precautions are maintained during water park activities, fatal injuries may occur. Although extremity traumas are common in water park injuries, fatal injuries particularly due to spinal and head trauma should not be disregarded. Waterslides comprise an important injury source in water parks¹⁵.

Prevention of emergencies and accidents within a waterpark must be a team effort – lifeguards and staff at all locations within the facility must maintain effective patron surveillance and continually reinforce the rules with patrons. For example, at a waterslide the lifeguard at the dispatch position should remind each rider of all rules; the lifeguard at the catch pool area should move riders away from the slide's entry point; the other lifeguards at the exit points should maintain patron surveillance in the catch pool.



Waterslide Dispatch Area which requires a lifeguard to monitor the time and space intervals of the users.

FIGURE C.3.1



Communication

Waterpark facilities use similar, of not the same, systems of communication as other aquatics facilities. Though there are some special considerations within waterparks. For example, a dispatch area lifeguard may not be able to see the lifeguards at the bottom of the slide. Hence, he or she must be able to communicate with management and fellow lifeguards using a method that does not require any visual contact.

Examples of the methods of communication that can be used within a waterpark include: telephone, hand signals, handheld flags, whistles, megaphones, air horns, public address systems, electronic switches and buttons, two-way handheld radios. Each area and/or feature within a waterpark may require a different method of communication based upon that feature's layout and other characteristics.

Surveillance

Lifeguards in waterpark environments may have their ability to effectively scan the water and provide sufficient patron surveillance. There are many features that may impede the lifeguards' line of sight and make it difficult or impossible to see large areas of the feature. For example, fountains, waterfalls, water dumps, and spray features all may make it impossible for lifeguards to scan and effectively provide surveillance of areas in and around these features. Additionally, when lifeguarding at a wave pool, it may become impossible to see users in the lull of each passing wave from the stationary, seated lifeguard station.

In these cases, lifeguards must re-position themselves or stand up to provide proper and effective surveillance to all users in all areas within the lifeguard's zone of coverage. If re-positioning is not sufficient, the lifeguard(s) must walk around to ensure surveillance of all users is possible and effective. If there remain areas within the lifeguard's zone of coverage that are difficult to scan, additional lifeguard(s) may be required so that the entire zone is effectively scanned.

Proper Scanning

Effective and proper scanning does not change from a swimming pool to a waterpark. But, it may require adjustments based upon the feature being scanned. Proper scanning in the waterpark setting still occurs in three stages:

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

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. There may be features within a waterpark ride that impede the lifeguards' ability to see the entirety of the zone of coverage. In a lazy river, for example, the lifeguard may have to walk throughout his or her zone of coverage to ensure effective scanning is possible. While at a wave pool, the lifeguard(s) may find that it is necessary to stand at his or her station.

If the lifeguard observes anything unusual, erratic or otherwise concerning he or she should **focus** on the patron(s) exhibiting this behavior and/or the area of the ride or feature where the activity is taking place and **size up again**. The focusing and sizing up stage requires the lifeguard(s) to be familiar with the hazards and the behaviors of someone in trouble for each ride within the waterpark. Additionally, when sizing up a possible situation or person requiring assistance, the lifeguard must learn to differentiate between someone who requires assistance and someone who may have been caught off-guard or been knocked over but is able to get up and exit the ride or feature without assistance. The ability to determine who requires assistance and who does not is a learned skill that each lifeguard will further develop with each shift and his or her familiarity with each ride increases.

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.

Rotations

Rotations of lifeguards within a waterpark setting should be conducted in the same manner they are conducted in non-waterpark aquatic facilities and swimming pools.

Steps of an Effective & Safe Rotation

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

Steps:

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

Steps of an Effective & Safe Dispatch Lifeguard Rotation

Steps:

1. Incoming dispatch lifeguard stands next to the dispatch lifeguard station, careful not to impede the view of the dispatch lifeguard.
2. Incoming and outgoing dispatch lifeguards communicate any pertinent information to one another.
3. Outgoing dispatch lifeguard maintains surveillance and rider dispatch duties while the incoming dispatch lifeguard gets situated.
4. Incoming and outgoing dispatch lifeguards dispatch at least one rider together.
5. Incoming dispatch lifeguard takes over full surveillance and rider dispatch duties.
6. Outgoing dispatch lifeguard s now free to move on to the next lifeguard station in the rotation cycle.

Water Emergencies – Chapter 4

OBJECTIVE(S): 1. Explain the need for emergency shutoffs, where they are located and when and how to utilize them; 2. Understand the additional steps that may need to be undertaken to perform a rescue within a waterpark feature; 3. Understand the special considerations for each type of waterpark feature when executing a water rescue.

Emergency Shutoffs

Sometimes referred to as the E-stop or kill switch, this button deactivates the power supply to the feature(s) of a waterpark ride (i.e. wave generator in a wave pool, water flow current in a lazy river). These shutoff buttons are red in color and are usually found on or near the lifeguard station. No matter where the emergency shutoff button is located for each ride within the waterpark, each lifeguard should know exactly where each one is and how to access it when needed.

Water Rescues

Due to the unique challenges presented by the features within a waterpark, water rescue procedures must be adapted to the conditions found within the feature for each rescue. It will be difficult if not impossible for lifeguard(s) to effectively respond and adapt the rescue procedure to the ride and conditions found if never practiced during in-service sessions. It is vital that lifeguards are trained and practice executing rescues of all kinds in all situations and locations within a waterpark's rides and features.

Special Considerations When Executing a Rescue in Waterpark Setting

- Always ensure the emergency shutoff button has been activated.
- Always:
 - Know your water depth.
 - Always enter at the deepest point if possible.
 - Always enter the water feet first with the slide-in entry or compact jump entry.
- Never fight the flow of water. Always move with the flow of the water:
 - Attempt water entry in the deepest “up current” position in a waterpark feature involving flow. In other words enter the water in a spot that the current helps move you toward the victim(s) as opposed to entering the water “down current” and fighting the flow to reach the victim(s).
 - Always attempt victim extraction by moving the victim the same direction as the flow of water.
 - Always position lifeguards facing away from the flow of water to help shield the victim(s) from the flow and to make it easier for lifeguards to secure and support the victim(s).
 - If possible, float with the victim(s).
- Always be prepared to initiate rescue breathing in the water as extinction in the waterpark setting can take longer given the unique layouts and features.

These guidelines and considerations apply to spinal trauma in the waterpark setting as well.

References

1. American College of Surgeons Committee on Trauma. Advanced Trauma Life Support, 7th ed. Chicago: American College of Surgeons, 2007.
2. Association for Experiential Education. <https://www.aeee.org/>.
3. Bart R. and Lau H. 2021. Shallow Water Blackout. Available: [Shallow Water Blackout - StatPearls - NCBI Bookshelf \(nih.gov\)](#).
4. Boyd C, Levy A, McProud T, Huang L, Ranases E, Olson C., Centers for Disease Control and Prevention (CDC). Fatal and nonfatal drowning outcomes related to dangerous underwater breath-holding behaviors - New York State, 1988-2011. MMWR Morb Mortal Wkly Rep. 2015 May 22;64(19):518-21.
5. Calvert, Deb. Six preferred learning styles for adults-Adapt your message for a better response. Web-based Managing Americans. Available at: <http://www.managingamericans.com/Workplace-Communication-Skills/Success/Six-preferred-learning-styles-for-adults-424.htm>.
6. Centers for Disease Control and Prevention. 2015. Fatal and Nonfatal Drowning Outcomes Related to Dangerous Underwater Breath-Holding Behaviors – New York State, 1988-2011. Available: [Fatal and Nonfatal Drowning Outcomes Related to Dangerous Underwater Breath-Holding Behaviors — New York State, 1988–2011 \(cdc.gov\)](#).
7. Centers for Disease Control and Prevention, National Center for Injury Prevention and Control. Web-based Injury Statistics Query and Reporting System (WISQARS) [online]. [cited 2012 May 3]. Available from: URL: <http://www.cdc.gov/injury/wisqars>.
8. CDC. Wide-ranging online data for epidemiologic research (WONDER). Atlanta, GA: CDC, National Center for Health Statistics; 2016. Available at <http://wonder.cdc.gov>.
9. Conner E. and Hawnwan P. 2020. Prehospital Use of Cervical Collars. Web-based EMSWorld Print Online Expo [online]. [cited 2020 February 28]. Available at: <https://www.emsworld.com/1223899/ce-article-prehospital-use-cervical-collars>.
10. Ham W, et al. Pressure Ulcers From Spinal Immobilization in Trauma Patients: A Systematic Review. J Trauma Acute Care Surg, 2014; 76(4): 1,131–41.
11. Hauswald M, Ong G, Tandberg D, Omar Z. Out-of-hospital spinal immobilization: its effect on neurologic injury. Acad Emerg Med, 1998; 5(3): 214-9.
12. Malvik, Callie. 2020. 4 Types of Learning Styles: How to Accommodate a Diverse Group of Students. First published in 2018. Available at: <https://www.rasmussen.edu/degrees/education/blog/types-of-learning-styles/>.
13. March J, et al. Changes In Physical Examination Caused by Use of Spinal Immobilization. Prehosp Emerg Care, 2002; 6(4):421–4.

14. Pia F. 1984. The RID factor as a cause of drowning. First published in Parks & Recreation, June: 52-67.
Available: www.pia-enterprises.com/RID.pdf
15. Soyuncu, Secgin & Yigit, Ozlem & Eken, Cenker & Bektas, First & Akcimen, Mehmet. (2009). Water park injuries. *Ulusal travma ve acil cerrahi dergisi = Turkish journal of trauma & emergency surgery: TJTES*. 15. 500-4.
16. Totten VY, et al. Respiratory Effects of Spinal Immobilization. *Prehosp Emerg Care*, 1999; 3(4): 347–52.
17. University of California Davis (UC Davis). (2011). *5-step experiential learning cycle definitions*. https://www.experientiallearning.ucdavis.edu/module1/e11_40-5step-definitions.pdf.
18. White CC et al. EMS Spinal Precautions and the Use of the Long Backboard – Resource Document to the Position Statement of the National Association of EMS Physicians and the American College of Surgeons Committee on Trauma. *Prehosp Emerg Care* 2014; 18(2): 306
18. Wurdinger, S. D., & Carlson, J. A. (2010). *Teaching for experiential learning: Five approaches that work*. Lanham, MD: Rowman & Littlefield Education.

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.

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