



**FOR YOUTH DEVELOPMENT®
FOR HEALTHY LIVING
FOR SOCIAL RESPONSIBILITY**

ENJOYING WATER SAFELY

**AQUATIC SAFETY
GUIDELINES FOR Ys
YMCA OF THE USA**



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YMCA of the USA's Aquatic Safety Guidelines for Ys and supporting materials were developed through a commitment to the aquatic safety excellence of member Ys with the help of representatives from the following organizations:

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ABOUT THESE GUIDELINES

The guidelines in this document are intended to be a foundation for aquatic safety for member YMCAs. Designed for Y staff and volunteers to use in developing operating protocols that conform to industry standards and best practices, these guidelines are not to be considered a uniform standard for all Ys. YMCA of the USA encourages individual Ys to create and adopt operating standards based on, or inspired by, this document. These guidelines are subject to current local, state, and federal laws and ordinances. In the event of a conflict between such laws and ordinances and these guidelines, follow the more stringent of the two.

HOW TO USE THIS DOCUMENT

This document is intended to be descriptive and user-friendly. Please note the following as you review these guidelines:

Sections

Topics in this document are categorized into six sections:

- Administration
- Training
- Supervision
- Facilities and Equipment
- Minimizing Risk
- Specific Environments and Activities

At the beginning of each section is a philosophical statement that guides that particular section. The first five sections contain aquatic safety information universal to operating an aquatic facility. The sixth section contains aquatic safety information that may be unique and may not necessarily apply to all Ys.

Rationales

Rationales provide further explanation, clarification, or source material for certain complex topic areas. Rationales are not provided for each topic.

Definitions

Definitions are provided at the end of this document for terms that may be unique to these guidelines and for concepts that lack a universal name and description across the aquatic industry. Defined terms are identified in **bold** the first time they appear.

Hyperlinks

Hyperlinks are found throughout this document and provide the user access to sample forms and visual descriptions of specific topics and concepts located on Exchange (yexchange.org) or the Internet.

SECTION 1 – ADMINISTRATION

Administration is essential to operating a safe and efficient aquatic environment. It provides guidelines, policies, and procedures as well as accountability for safety implementation strategies.

AQUATIC LEADERSHIP

Demonstrated Experience. Ensure that **aquatic leadership** staff have demonstrated experience operating and managing aquatic facilities.

Minimum Credentials. Ensure that those in aquatic leadership positions hold current certifications in the following, at a minimum. In some cases, these credentials may be acquired after hiring (see [section 2 – Training, Aquatic Leadership, Training Plan](#)).

- [YMCA Lifeguard](#) or equivalent lifeguard training certification
- [Basic life support](#) or [professional rescuer CPR/AED](#) certification—renewed annually
- [First aid](#) certification
- [Emergency oxygen administration](#) certification
- **Pool operator** certification ([National Swimming Pool Foundation Certified Pool/Spa Operator \[CPO\]](#) or equivalent)
- Lifeguard supervisor certification
- [YMCA Lifeguard Instructor](#) or equivalent
- Instructor in a nationally recognized basic life support or professional rescuer CPR/AED program
- Instructor in a nationally recognized first aid program
- [YMCA Lifeguard Trainer](#) or equivalent (recommended)
- Trainer certification in a nationally recognized basic life support or professional rescuer CPR/AED program (recommended)
- Trainer certification in a nationally recognized first aid program (recommended)

Rationale: Basic-level certifications are required for an aquatic leadership position. Instructor-level certifications are necessary to properly maintain high-quality lifeguarding and safety. Not requiring these credentials directly impacts the quality of staffing and safety at Ys.

On-Duty Leader. Develop an aquatic leadership hierarchy that allows a staff member with direct aquatic supervisory responsibility to be on duty at all times the pool is in use.

HIRING PRACTICES SPECIFIC TO LIFEGUARDS

Interview Process. Administer a thorough interview to all candidates applying for lifeguarding positions prior to employment that includes

- a demonstration of knowledge that involves scenario and rescue information;
- physical testing, including swimming and treading water; and
- a water-rescue scenario that involves removal of a victim from water and CPR skills.

Rationale: A testing process is a crucial step in determining the knowledge and ability of new lifeguard hires. This is particularly vital if candidates were not trained by a lifeguard instructor on staff at the facility. Use the guidelines from the U.S. Department of Labor Employment and Training Administration when developing testing procedures. These guidelines can be found in the following document: [Testing and Assessment: An Employer's Guide to Good Practices](#).

Job Description. The physical demands described here are representative of those that must be met by a staff member to successfully perform the essential functions of a lifeguard. Reasonable accommodations may be made to enable individuals with diverse abilities to perform the essential functions. Include in the job description that the new staff member is able to do the following:

- Physically perform all skills required of a lifeguard.
- Hear noises and distress signals in the aquatic environment, including in the water and anywhere around the **zone** of responsibility, with or without reasonable accommodation.
- Remain alert with no lapses of consciousness.
- See and observe all sections of an assigned zone of responsibility, with or without reasonable accommodation.

Rationale: Data support the importance of vision and hearing to lifeguarding. In a review of research conducted by the [United States Lifeguard Standards Coalition](#), it is recommended that aquatic facilities establish minimum vision and hearing standards. Ys must comply with the [Americans with Disabilities Act \(ADA\)](#).

DOCUMENT RETENTION

Certifications and Trainings Documentation. Keep on file copies of all current staff certifications and trainings required, including the following:

- [YMCA Lifeguard](#) or equivalent lifeguard training certification
- [Basic life support](#) or [professional rescuer CPR/AED](#) certification—renewed annually
- [First aid](#) certification
- [Emergency oxygen administration](#) certification
- Pool operator certification ([National Swimming Pool Foundation Certified Pool/Spa Operator \[CPO\]](#) or equivalent)

- Applicable instructor, technical specialty, and safety certifications
- Proof of training that satisfies **Occupational Safety and Health Administration (OSHA)** requirements for bloodborne pathogens and **hazard communication standard** training requirements

Rationale: Retaining copies of staff trainings and certification is a best practice among aquatic facilities.

Record-Keeping System. Establish a comprehensive and practical record-keeping system and have all information readily available and reviewed annually by aquatic leadership or higher management positions to ensure proper safety and risk management compliance. Keep documents including, but not limited to, the following:

- Accident/incident reports and applicable **rescue reports**
- Assessment records
- Bodily fluid contamination response logs
- Chemical inventory logs and related testing forms
- Equipment maintenance and inspection forms
- **In-service training** records
- Local health department inspections and reports
- Staff **orientation** and training information
- Structural and electrical inspections

Records Retention Policy. Retain all YMCA aquatic legal documents and forms. The length of retention for each document varies. Each association drafts a policy to ensure the correct documents are not being destroyed. See the [guidelines and recommendations](#) on this matter available from YMCA of the USA. Have your Y's **records retention policy** reviewed by your Y's local attorney.

CODES AND REGULATIONS

Code Adoption. If local or state regulatory codes for swimming pools do not exist, adopt the regulatory codes of another state or recognized standards such as those from the [American National Standards Institute \(ANSI\)](#) or the **Centers for Disease Control and Prevention's (CDC) [Model Aquatic Health Code](#)**.

Rationale: Swimming pool codes provide a framework for maintaining the health, safety, and general well-being of patrons, and Ys are encouraged to maintain the highest standards. Localities and states that lack or have minimal codes may not necessarily be current with what is considered industry standards. In addition, best practices require that a document or set of codes be in use to ensure the safety and well-being of patrons. Ys in states with minimal regulation are encouraged to actively research and identify an appropriate pool code to follow.

Law and Code Compliance. Comply with all laws and codes as required by local, state, and federal governments. Keep copies of all codes and permits. Examples include, but are not limited to, the following:

- The Americans with Disabilities Act (ADA)
- Bacteriological reporting

- [Child abuse prevention](#) policy
- Federal, state, and local labor laws and regulations
- Licensing requirements
- Local electric, building, and fire codes
- Operating permits
- Occupational Safety and Health Administration (OSHA) regulations
- State and/or local health department regulations for swimming pools
- **Virginia Graeme Baker Pool and Spa Safety Act** requirements

AQUATIC OPERATIONS

Aquatic Facility Operations Manual. Develop a facility operations manual and keep it on-site. Have in place specific policies to address safety concerns, including the following, at a minimum:

- Accident and incident report forms
- Aquatic staff handbook
- Bloodborne pathogens exposure plan
- Copies of applicable local, state, and federal laws, regulations, and codes
- Copy of the facility operational permit
- Copy of the Virginia Graeme Baker Pool and Spa Safety Act certification
- Daily logs used
- Emergency phone numbers
- Emergency response and communications plan composed of an **emergency action plan (EAP)**, facility evacuation plan, communication plan, and inclement weather plan that covers the following, at a minimum:
 - [Child abuse prevention](#) and reporting procedures
 - Drowning or submersion events
 - Equipment maintenance and operation
 - Hypoxic blackout events
 - Missing person events
 - Natural disasters and severe weather
 - Power failure
 - Program-specific emergency procedures, if applicable
 - Properly securing and storing equipment after hours or at the end of the season
 - Rental agreements and contracts for rental groups
 - Securing the facility at the end of the day or the end of the season
 - Additional elements found in section 6 of the [Model Aquatic Health Code](#)
- Facility rules and regulations
- Facility safety checklists used
- Fecal/vomit/blood contamination response plan (Elements of a fecal/vomit/blood contamination response plan can be found in section 6 of the [Model Aquatic Health Code](#).)
- Hazard communications plan
- Local health department regulations, if applicable
- **Safety plan** composed of a staffing plan, EAP, preservice training plan, and an in-service training plan (Elements of a safety plan can be found in section 6 of the [Model Aquatic Health Code](#).)

- Staff training records
- **Zone validation plan**/diagram(s)

Aquatic Staff Handbook. Develop an aquatic staff handbook and make it available to each staff member. A well-written handbook can help lifeguards, nonlifeguard aquatic staff, and support personnel understand their roles and responsibilities in day-to-day operations. Include the following in the manual, at a minimum:

- Accident and incident reports
- All policies, standards, and operating procedures
- Aquatic program descriptions
- Bathing code
- Information about the Y's culture, cause, and mission
- Instructional program protocols
- Job description(s)
- Lifeguard/staff conduct guidelines
- Personnel policy
- Pool and diving rules
- Procedures for enforcing rules and regulations
- Specific policies and procedures related to individual programs, such as health and safety, emergency procedures (EAPs), Occupational Safety and Health Administration (OSHA) rules regarding bloodborne pathogens, hazard communications, **recreational water illness** prevention and response, and [child abuse prevention](#)
- Substitution procedures
- YMCA organizational chart with names
- Zone of patron surveillance and diagrammed zones

Daily Safety Inspections. Establish daily, ongoing safety inspections of

- applicable emergency alarm systems;
- deck and facility equipment;
- noise, ambient air temperature, and humidity levels; and
- rescue and safety equipment.

Facility Equipment. Have the following equipment available in quantities appropriate for the facility:

- Filled water bottles
- Hats
- Lightning detector
- Ring buoy
- Shepherd's crook
- Sunglasses
- Sunscreen
- Umbrellas
- Weather radio

Lifeguard Equipment. Ensure that lifeguards are **rescue ready**, with the following equipment and systems available and accessible at all times:

- AED
- Backboard with a minimum of three body straps and a head-restraint system
- Emergency call system to notify 911 or other YMCA staff
- Emergency oxygen delivery system
- First aid kit stocked to handle various major and minor emergencies for a minimum of 10 people (see [Aquatic Safety Equipment](#) for a list of recommended first aid supplies)
- Manual suction device
- One [rescue pack](#) per lifeguard containing **personal protective equipment (PPE)**, worn at all times
- One rescue tube per lifeguard, worn at all times
- One **summoning device** per lifeguard, worn at all times
- Uniforms that readily identify lifeguards as members of the lifeguard staff, consistent with current YMCA of the USA (Y-USA) branding guidelines and with the word *lifeguard* clearly visible

Lifeguard Quick Checks. Have Y staff conduct [lifeguard quick checks](#) a minimum of once daily.

Lifeguard Station Positioning. When positioning a lifeguard station, consider the following:

- Account for the changing effects of glare, shadows, and lighting.
- Be prepared for varying weather conditions.
- Ensure appropriate chair height for water depth.
- Ensure lifeguards can reach all points in an assigned zone within 20 seconds.
- Ensure proximity to the water's edge to prevent blind spots directly in front of the stand.
- Ensure sight lines are clear so lifeguards can appropriately scan their assigned zone.
- Overlap all zones with other zones to ensure complete pool coverage.
- Require lifeguards to scan no more than 180 degrees to cover their zone.

Operations Assessments. At a minimum, have an annual independent assessment of the aquatic facility operations.

Rationale: Independent assessments provide an unbiased, objective review of the aquatic safety operations and identify areas for improvement, especially for lifeguard operations. Additionally, such assessments help keep facilities accountable to recommendations and regulations. They provide aquatic leaders the opportunity to learn how staff are performing and identify safety and response issues with the facility. They also allow aquatic leaders to ask a professional for help, ideas, or guidance. Refer to Y-USA's [Aquatic Assessment Services fact sheet](#) for further information.

Safety Performance Criteria—Nonaquatic Staff. Include aquatic safety performance criteria in all YMCA positions (e.g., early learning, afterschool, day camp), especially those that come in contact with or are exposed to the aquatic facility. See suggested [Model Aquatic Safety Performance Criteria for Nonaquatic Staff](#).

Zone of Patron Surveillance. Have in place a zone validation plan to ensure that all zones are appropriate for the facility and allow for appropriate response times. Evaluate each lifeguard zone seasonally for size and effectiveness. Have the diagrammed zones posted for staff review.

Rationale: Ensure each zone gives the lifeguard a clear view of the bottom, middle, and top of the pool. This helps ensure patron safety. Many factors (e.g., the sun, number of swimmers, program needs) can change depending on the season of the year.

SECTION 2 – TRAINING

The Y is committed to the safety of everyone who uses our aquatic facilities. It is critical that we diligently train Y staff to prevent, recognize, and respond to all aquatic incidents.

AQUATIC LEADERSHIP

Leadership Development. Have a professional development training plan for aquatic leadership that takes into account the need for advanced certifications, leadership competency development, aquatic management training, technical training, continuing education, conferences, and networking opportunities.

Rationale: Obtaining certifications, while critical to leadership development, is only the beginning of acquiring knowledge in aquatics. Exposure to the CAUSE-DRIVEN LEADERSHIP® competency model, other aquatic professionals, and aquatic-based presentations enhances the knowledge and confidence of aquatic leadership. In addition, this exposure creates a valuable network of individuals who can provide resources and support.

Leadership Transitions. During transitions in aquatic leadership, ensure that all aquatic standards are maintained and the aquatic facility is adequately supervised.

Rationale: During transitions in aquatic leadership, a gap in coverage and supervision often occurs. To continue providing for the safety of patrons, appoint an individual to ensure that lifeguard and facility operations are effectively and safely maintained.

Orientation. Upon hiring aquatic leadership staff, provide an orientation delivered by someone with demonstrable knowledge. At a minimum, include the following in the orientation:

- [Child abuse prevention](#) policy
- Emergency action plan review
- Occupational Safety and Health Administration (OSHA) workplace safety practices
- Pool and facility orientation and operation
- Pump room orientation and operation
- Safety team training topics found under "Safety Plan" in section 6 of the [Model Aquatic Health Code](#)

Training Plan. Have in place a **30/60/90-day training plan** for aquatic leadership staff to address any immediate gaps in certifications and knowledge.

Rationale: Due to various factors, including the lack of a centralized training program or similar post-high-school-degree track, candidates for full-time aquatic positions may not necessarily possess advanced skills or knowledge in aquatics. In some cases, many of the required minimum credentials are acquired post hire. Establishing a 30/60/90-day training plan is a proactive approach to developing new leadership staff to help them close gaps in necessary skills and knowledge.

LIFEGUARD STAFF

In-Service Training. Conduct a minimum of four hours of in-service training per month for all lifeguard staff. Include these in-service training topics (among others):

- CPR/AED skills
- Emergency response, including emergency action plan (EAP) drills
- First aid skills
- **Scanning** and patron surveillance
- Spinal injury management
- Water-rescue skills

Rationale: Unused skills deteriorate without practice. Regular in-service training has long been considered an industry standard.

Job Shadowing. Have new lifeguards shadow other lifeguards, under the supervision of an experienced staff member, for a minimum of two shifts prior to assigning the new lifeguard a zone of responsibility.

Rationale: A job-shadow period allows experienced lifeguards to help new hires become acclimated to their surroundings. It also provides a support structure as the new lifeguard refines scanning technique and patron interactions.

Lifeguard Competition. Consider instituting a lifeguard competition as part of the training program.

Rationale: In addition to instilling a sense of professionalism, maintaining a high level of skill and knowledge, and team building, lifeguard competitions provide valuable training experiences that can assist lifeguards in effectively responding to an actual emergency and preparing for the stresses that occur during an emergency. See YMCA of the USA's [Guidelines for Hosting Local Lifeguard Competitions](#).

Lifeguard Drills With Emergency Medical Services (EMS). Conduct a minimum of one EAP drill per year in partnership with your local EMS.

Lifeguard Emergency Response Protocol. Develop and implement a standardized lifeguard response protocol for various emergencies. Ensure that the facility's EAP supports this protocol.

Rationale: Y-owned or -operated aquatic facilities might employ lifeguards trained by different nationally recognized agencies. For consistency and quality, having in place a single training protocol equips staff to deliver a high-quality, collaborative rescue response. For each facility, establish an EAP that results in a unified and consistent response system.

Orientation. Prior to their first shift, thoroughly orient new lifeguards to the environment in which they will be guarding. Include oral, written, and physical components with proper documentation. This includes, but is not limited to, the following:

- Aquatic department policies and procedures
- [Child abuse prevention](#) policy

- Emergency policies and procedures, including the EAP
- Facility rules and injury prevention policies
- Location and use of personal protective equipment (PPE)
- Location and use of rescue and resuscitation equipment
- Occupational Safety and Health Administration (OSHA) workplace safety practices
- Safety team training topics found under “Safety Plan” in section 6 of the [Model Aquatic Health Code](#)
- Zones and **rotations**

Physical Conditioning. Have lifeguard staff follow a physical conditioning program appropriate to the aquatic facility.

Preservice Training. Ensure that lifeguard staff have appropriate training prior to service, with renewal training at appropriate intervals. This includes current certifications and training in the following:

- [YMCA Lifeguard](#) or equivalent lifeguard training certification
- [Basic life support](#) or [professional rescuer CPR/AED](#) certification—renewed annually
- [First aid](#) certification
- [Emergency oxygen administration](#) certification
- Pool operator certification ([National Swimming Pool Foundation Certified Pool/Spa Operator \[CPO\]](#) or equivalent)
- Proof of training that satisfies OSHA requirements for bloodborne pathogens and hazard communication standard training requirements

Rationale: The practice of annually retraining staff in CPR/AED is based on the following:

- Research conducted by the American National Red Cross indicated the lack of supporting evidence for a two-year CPR certification (ACFASP, 2009).
- OSHA’s “Best Practices Guide: Fundamentals of a Workplace First-Aid Program” (2006) encourages a CPR-skills practice session every six months and recommends annual recertification in CPR/AED skills.
- A study published in the journal *Resuscitation* (Andresen et al., 2008) noted a correlation between reduced skill retention and lack of six-month skill reviews.

NONLIFEGUARD AQUATIC STAFF

Orientation. Thoroughly orient new aquatic staff to the environment where they will be working. Document these orientations, which can be both oral and written. Include the following:

- [Child abuse prevention](#) policy
- Deck orientation
- Department and aquatic facility orientation
- Emergency policies and procedures, including the emergency action plan (EAP)
- Meeting and training requirements
- Occupational Safety and Health Administration (OSHA) workplace safety practices
- A plan to close training gaps (see [section 2 – Training, Nonlifeguard Aquatic Staff, Training](#))
- Program supervision and safety policies

- Safety team training topics found under “Safety Plan” in section 6 of the [Model Aquatic Health Code](#)
- Uniform requirements

Response Readiness. Practice EAP **response readiness** a minimum of quarterly through in-service skill practice.

Training. Train nonlifeguard aquatic staff to support lifeguards during an emergency. Include in the EAP the scope of their roles and responsibilities during an emergency. It is recommended that nonlifeguard aquatic staff hold current certifications in the following:

- [YMCA Aquatic Safety Assistant \(YASA\)](#) or equivalent certification
- [Basic life support](#) or [professional rescuer CPR/AED](#) certification—renewed annually
- [First aid](#) certification
- [Emergency oxygen administration](#) certification
- Applicable technical specialty and safety certifications

Rationale: It requires a coordinated team effort to ensure that an aquatic environment is rescue ready. Train all staff working in these environments to support one another according to the facility’s EAP. Applicable specialty and safety certifications refer to the safety certification requirement for various programs. Depending on the program, it may be unnecessary to require both the applicable specialty and safety certification and YASA or equivalent. Evaluate the standard practices for the programs offered at each facility when determining safety training requirements for nonlifeguard aquatic staff.

DESIGNATED NONAQUATIC SUPPORT STAFF

Orientation. Thoroughly orient designated **nonaquatic support staff** to the aquatic facility. Document these orientations, which can be both oral and written. Include the following:

- [Child abuse prevention](#) policy
- Deck orientation
- Department and aquatic facility orientation
- Emergency policies and procedures, including the emergency action plan (EAP)
- Meeting and training requirements
- Occupational Safety and Health Administration (OSHA) workplace safety practices
- Safety policies
- Safety team training topics found under “Safety Plan” in section 6 of the [Model Aquatic Health Code](#)

Response Readiness. Practice response readiness to the EAP at least quarterly through in-service skill practice. Increase this frequency as necessary depending on the requirements of the position and the position’s involvement with the aquatic department.

Training. Train designated nonaquatic support staff to support lifeguards in an emergency. Ensure the training reflects the scope of their emergency roles and responsibilities in the EAP.

It is recommended that designated nonaquatic support staff hold current certifications in the following:

- [YMCA Aquatic Safety Assistant \(YASA\)](#) or equivalent certification
- [Basic life support](#) or [professional rescuer CPR/AED](#) certification—renewed annually
- [First aid](#) certification
- [Emergency oxygen administration](#) certification

Rationale: Designating dedicated nonaquatic support staff, such as a leader on duty, ensures that the Y has adequate resources to respond to and manage an emergency at all times. This can be a challenge during nonpeak hours when staff volume is reduced. When identifying and selecting individuals as designated nonaquatic support staff, consider the swimming ability of the staff member. Do not designate staff members who are unable to complete the basic swimming skills found in the YASA or equivalent certification. Designating dedicated nonaquatic support staff also allows for cross-training staff who have regular access to the aquatic facility, such as camp staff, in specific safety techniques and skills.

SECTION 3 – SUPERVISION

Lifeguards and aquatic leaders are essential to the safety of our aquatic facilities and help ensure that our patrons enjoy a safe, fun aquatic experience. Proper and effective lifeguard supervision, aquatic leadership, and supervision from branch management provides our patrons, community, and the Y a safer aquatic environment.

MINIMUM SUPERVISION

Active Supervision. Ensure that lifeguards employed by your Y provide **active supervision** during all times the pool is in use. When multiple pools are on-site, provide a lifeguard for each pool in use.

Branch Leadership Position. Establish an aquatic leadership position for each branch that meets the training requirements found in [section 2 – Training, Aquatic Leadership](#).

Lifeguard Staffing. Make it a priority to have multiple lifeguards on duty at all times the pool is in use.

Rationale: The skills and training provided to lifeguards through nationally recognized training agencies emphasize a team approach to care. Staffing multiple lifeguards at all times allows them to apply their rescue skills as they were trained to do. Staffing multiple lifeguards at all times also allows for patron interactions without compromising patron surveillance. If such staffing is not financially feasible, evaluate the number of swimmers (bather load), level of risk, and available support structure when determining when to use a single lifeguard on duty.

Lifeguard Support. Ensure that aquatic leadership or a designated nonaquatic support staff member is present at all times to support lifeguards in an emergency. See [section 1 – Administration, Aquatic Leadership](#) and [section 2 – Training, Designated Nonaquatic Support Staff](#) for more.

Lifeguard-to-Patron Ratios. Adjust lifeguard-to-patron ratios by assessing the following:

- Available equipment
- Availability and qualifications of other support staff
- Compliance with applicable state and local codes (make sure to meet or exceed these codes)
- Environmental factors such as sun glare, rain, wind, and shadows from buildings or trees that make viewing areas of the water or bottom difficult
- Number and ages of patrons in the pool
- Size and shape of the pool
- Skill level of lifeguards
- Skill level of patrons
- Type of program

Rationale: There is no scientific or other demonstrated evidence that a particular ratio of lifeguards to patrons positively affects aquatic safety. In some cases, the “more is

better” approach to lifeguard staffing may produce a false sense of security at best, and at worst may result in lifeguards being unsure of the extent of their zones. The recommended approach is to consider a number of factors when determining lifeguard-to-patron ratios. These factors take into account environment, length of active supervision, and visual and audible stimuli.

SUPERVISION STRATEGIES

Lifeguard Chairs. Provide a minimum of one lifeguard chair for each lifeguard on active supervision. Ensure the height of the chair is enough to elevate the lifeguard to an eye level above the heads of patrons.

Rationale: Positioning the lifeguard at a height any lower than eye level above the heads of patrons increases the risk that a victim would be obscured from the lifeguard by swimmers, the pool edge, or other features. This recommendation does not preclude the use of standing, roving, or in-water lifeguard positions, or the use of scanning techniques that require a periodic change in body position.

Lifeguard Rotation. Rotate lifeguards every 20 to 30 minutes. Provide lifeguards a minimum of one 10-minute break from lifeguarding every hour. As the temperature and humidity rise, increase the frequency of lifeguard rotations and breaks regardless of whether or not the aquatic facility is indoors or outdoors.

Rationale: The “Bibliographic Study on Lifeguard Vigilance,” a report published in 2001 by the Applied Anthropology Institute in France, surveyed several studies with implications for lifeguarding. One study referenced the Mackworth Clock Test, commissioned in 1950 by the British Royal Navy, which found that optimal vigilance cannot be maintained for more than 30 minutes. A subsequent study published in 1970 (Mackworth) showed that breaks for as little as 10 minutes can return vigilance to the same level as at the start of the task. Another study, referenced by Pigeau, Angus, O’Neill, and Mack (1995), examined vigilance among air traffic controllers and found that vigilance over time is negatively affected during periods of low activity. The study’s author concluded that short activity cycles with frequent breaks should be used by lifeguards during periods of low activity.

Rescue Readiness. Lifeguards performing active surveillance require rescue readiness as described below:

- Posture erect and forward
- Rescue tube across lap or in hand
- Strap over shoulder and diagonally across chest; excess strap secured in hand
- Scanning from the bottom, middle, and top of the water throughout the assigned zone and including the deck and water features in the assigned zone

DROWNING PREVENTION STRATEGIES

Aquatic Safety Technology. As much as possible, identify and incorporate aquatic safety technology, such as surveillance systems or alarms, as part of your aquatic safety implementation strategies and as a supplement to the supervision provided by lifeguard staff.

Rationale: Although aquatic safety technology systems **DO NOT** replace the need for continuous lifeguard surveillance, they can assist a lifeguard in surveillance duties. Appropriate lifeguard protocols, combined with aquatic safety technology, may save valuable time during an emergency. Refer to YMCA of the USA's (Y-USA) [Aquatic Safety Technology fact sheet](#) for further information.

Life Jackets. Require nonswimmers to wear a U.S. Coast Guard–approved life jacket in addition to requiring **reach supervision**. See Y-USA's [Using Life Jackets as a Layer of Protection at Your Y fact sheet](#).

Outside Groups. Have all participants in a **special or outside group**, regardless of their membership status, participate in a **swim test** and an orientation that includes an explanation of rules, pool depths, restricted areas, buddy checks, swim tests, and how individuals' swimming ability will be marked.

Reach Supervision. Require reach supervision for younger children classified as nonswimmers by a swim test.

Swim Test. Require a swim test of all youth and adults whose ability concerns a lifeguard before allowing the patrons to enter water that is deeper than their armpits. Use a system to identify or mark patrons according to their swimming ability, including nonswimmers. Alert patrons to any appropriate restrictions on their pool use. See a [sample swim test policy](#).

Rationale: Swim testing identifies individuals who have poor swimming skills so that Ys can implement strategies, such as pool-use restrictions, that provide additional safety measures in drowning prevention. Currently, there is no consensus on the definition of a *nonswimmer*. YMCAs are encouraged to define what constitutes poor or underdeveloped swimming ability until a standard description is available.

SECTION 4 – FACILITIES AND EQUIPMENT

Aquatic facilities that are properly operated and maintained; follow recognized industry standards (such as the [Model Aquatic Health Code](#)); and comply with all local, state, and federal regulations help ensure the health and safety of our patrons at the highest level possible.

COMPLIANCE

Chemical Handling, Storage, and Disposal. Follow chemical handling, storage, and disposal procedures as required by the **Environmental Protection Agency (EPA)** and Occupational Safety and Health Administration (OSHA).

Chemical Identification. Clearly [identify](#) and properly store chemicals. Post a warning sign on the outside of the door where chemicals are stored that says, “Chemical Storage – Authorized Personnel Only,” with an appropriately marked OSHA-compliant placard visibly placed.

Contamination-Response Policy. Establish a contamination-response policy that identifies response procedures, documentation, and prevention procedures. At a minimum, follow the Centers for Disease Control and Prevention’s (CDC) recommendations for preventing contamination incidents and recreational water illness. If state or local codes exceed these requirements, follow the more stringent standard.

Local Y Operation Standards. Establish and follow association- or branch-specific standards for pool operation, in compliance with existing federal, state, or local codes.

Manufacturers’ Equipment Manuals. Have on file and readily available for reference all **manufacturers’ equipment manuals** for mechanical pool and spa equipment.

Personal Protective Equipment. Provide all staff members required to handle chemicals with [personal protective equipment \(PPE\)](#) (e.g., gloves, eye protection for liquid chemicals, face protection, inhalation protection, and an apron or PVC suit to protect clothes) and train them in the use of PPE according to OSHA standards.

Pool Operator. Have on staff a certified pool operator to monitor and maintain the disinfection, filtration, and mechanical operation of each aquatic facility and to ensure that local and state health department standards are being met. Keep the proof of this certification on-site and readily available.

Pool Operator Manual. Have available a copy of the pool operator manual specific to the training the pool operator holds.

Safety Data Sheets. Assess **safety data sheets (SDS)** for possible updates each time chemicals are delivered. Post SDS in the room where chemicals are stored and used, and compile SDS in a clearly labeled binder that is readily available to staff.

DESIGN AND EQUIPMENT

Alarm System. Equip pools and spas with an emergency alarm system to summon help to the pool or spa area. Multiple alarm activation sites or handheld wireless panic buttons can provide for immediate access to the alarm and faster response time.

Alarm System Testing. Conduct and document tests of the emergency alarm systems twice weekly.

Deck and Dock Coating. Cover decks and docks with nonslip coating. Ensure that at least one side of the deck or dock is wide enough to allow access for extricating a victim. For new construction, build decks and docks with adequate width for extrication on all sides.

Deck Cleaning. Regularly clean and sanitize decks and other wet areas with a disinfecting solution that is designed for this purpose and does not interfere with water chemistry.

Facility Equipment Safety Checks. Whenever facility equipment such as piers, diving boards, ladders, or rafts are present, ensure that they are in proper repair and safe working condition. Include these items in the facility safety check and the preventive maintenance schedule.

Floor Drains and Suction Outlets. Ensure that [floor drains](#) and suction outlets are compliant with the Virginia Graeme Baker Pool and Spa Safety Act of 2007 and can be seen from the surface at all times. Drains require a visual inspection at each shift change, which includes inspecting for broken grates, missing hardware, and other defects. Implement protocols to ensure any potential issues are reported to aquatic leadership.

Outdoor Pool Underwater Lighting. Illuminate outdoor pools by underwater lighting, providing a minimum of 60 **footcandles** of illumination measured at the surface.

Perimeter Fencing. For all outdoor aquatic facilities, have perimeter fencing at least six feet high (eight feet recommended). Ensure that fencing is in good condition and inspected regularly for protrusions, sharp edges, or openings.

Play Structures Cleaning. Clean and sanitize slides and play elements with a chlorine solution only.

Pool Lighting. Illuminate pools so there is a minimum of 50 footcandles at the water's surface when underwater lighting is on. Without underwater lighting, a minimum illumination of 50 footcandles is also recommended.

Pool Signage. Permanently mount rules, regulations, warning signs, and procedures for using the aquatic facility, locker rooms, slides, spray features, whirlpools, and diving areas. Mount the rules in the pool, whirlpool, and locker room areas. Write rules in clear and (as much as possible) positive language. Include rules required by state or local law or, at a minimum, rules found in section 6 of the [Model Aquatic Health Code](#). Have staff review the rules with patrons and enforce the rules consistently.

Safety Lines. During recreational or open swim times, place a floating safety rope to signify depth changes from shallow play areas, from shallow to deep water, or any sudden changes in

water depth. Provide a safety line that is sturdy enough to support an adult with his or her head out of the water.

Rationale: A visual marker provides nonswimmers a visible boundary they should not cross. It may be necessary for Ys to place multiple boundary lines, especially in zero-depth pools to indicate the transition from 2.5 feet to deeper water.

Seasonal Closure. For seasonal aquatic facilities, when the facility has been closed for the season, post a sign stating the facility is closed and no lifeguards are on duty.

Ventilation Systems. Keep ventilation systems in operation 24 hours per day. Maintain a slightly negative pressure in indoor aquatic facilities, spa and whirlpool areas, and locker rooms. Monitor cubic feet per minute (CFM) to ensure adequate circulation according to the design of the ventilation system.

PREVENTIVE MAINTENANCE AND REPAIR

Electrical Inspections. Conduct an electrical inspection every three to five years to identify potential shock hazards to staff and patrons.

Emergency Lighting System. Have an emergency lighting system in the pool and whirlpool areas, which is tested weekly by facility staff.

Maintenance and Inspection Schedules. Develop a written preventive maintenance and inspection schedule according to manufacturers' recommendations, keeping inspections and maintenance records on file.

Maintenance Inspections. Ensure all aquatic facilities and equipment are regularly inspected for safety by a certified pool operator to determine their suitability for use. Determine the frequency of inspections based on

- manufacturers' recommendations;
- frequency of use; and
- the level of inherent risk involved.

Pool Draining and Filling. Drain, clean, and fill pools annually. During this time, secure the physical pool structure from unauthorized and unsupervised entry and conduct appropriate inspections.

Rationale: Annual draining and filling allows for a detailed inspection of the pool surfaces for physical defects. This practice also helps address certain concerns with water quality. Ys using pool chemicals that increase total dissolved solids (TDS) or chlorine-stabilizing compounds may experience problems with water quality that can affect the safety of pool users. If your Y uses these compounds, schedule an annual draining to reduce or eliminate potentially harmful effects.

Roof and Ceiling Inspections. Have all roof and ceiling components inspected by a licensed structural engineer at least once every five years. Keep on file a schedule of inspections and written reports.

Suspended Ceiling Inspections. Have all suspended ceilings and related components inspected every three years by a licensed structural engineer. Keep on file a schedule of inspections and written reports.

Rationale: Suspended ceilings are at a higher risk of failure due to corrosion. If your Y has suspended ceilings, develop a strategy to remove them.

Systems Maintenance. Maintain the emergency lighting system; the regular pool lighting; and the mechanical, ventilating, and plumbing systems according to the manufacturers' specifications. Keep them in good working condition at all times, and conduct a documented inspection of them at regular intervals. Keep a record of maintenance on file.

NEW CONSTRUCTION AND RENOVATIONS

Construction Codes. Perform construction of new facilities and renovations of existing facilities in accordance with YMCA of the USA's (Y-USA) *Aquatic Safety Guidelines for Ys* and all local, state, and federal codes regarding swimming pool construction.

Construction Plan Review. Have all plans for construction or renovation of aquatic facilities reviewed by aquatic professional(s) experienced in the design and planning of aquatic facilities, programming, and safety. Y-USA resources and staff are available to assist in this process, including specialists in property development, aquatic safety and risk, and aquatic programs.

Rationale: The construction and renovation of commercial aquatic facilities require experience and knowledge that may not be held by many pool builders and designers. In addition, architects who are inexperienced in commercial aquatic facilities often emphasize aesthetic beauty, which is frequently at odds with aquatic safety and programming. Working with an aquatic professional experienced in the design and planning of aquatic facilities allows the facility to properly incorporate safety elements while maintaining aesthetics. This also provides another point of view to ensure that the mechanical, ventilation, and lighting systems are appropriate for the facility.

SECTION 5 – MINIMIZING RISK

Strong risk management and safety practices help protect our patrons and community, prevent injuries, and reduce the frequency and severity of incidents.

RISK MANAGEMENT AND SAFETY

Accident/Incident Reports. Have accident/incident reports reviewed weekly by aquatic leadership to

- determine if corrective action is needed;
- identify training and supervision issues;
- ensure accurate reporting and documentation of incidents and outcomes;
- evaluate effectiveness of emergency procedures; and
- discuss issues with association leadership on a monthly/quarterly basis as part of your Y's overall risk management strategies.

Facility-Use Agreements. Use a facility-use agreement, which requires a signature, for small events.

Liability Waivers. Obtain a signed waiver of liability for every adult and child swimmer as part of their membership or program participation agreement, including guest-pass and day-pass users. Ensure that minors have the signature of a legal guardian.

Loss Mitigation. Have Y aquatic and association leadership anticipate and evaluate loss exposures, hazards, and threats on a regular basis to determine the likelihood of occurrence and assess the procedures in place to mitigate a loss.

Maintenance and Inspection Logs. Ensure that aquatic leadership review aquatic facility maintenance, inspection, and repair logs on a regular basis to verify accuracy and that the records are maintained for retrieval when needed.

Non-YMCA-Owned Facilities. When managing non-YMCA-owned facilities, be sure to do the following:

- Ensure the association CEO or Chief Financial Officer (CFO) is involved in the contract process.
- Put in place a written agreement outlining the parties' responsibilities and protections for the Y. Have this reviewed by the Y's legal counsel.
- Review insurance requirements and obligations with the association's leadership and insurance representatives.

- Ensure off-site aquatic facilities used by your YMCA for programming—such as swim lessons, water aerobics, or any other type of instruction—comply with all of your Y’s safety standards and procedures.
- Do not “rent” or dispatch lifeguards to private homeowners for parties or any lifeguarding-related responsibilities. Limit all off-site lifeguarding activities to YMCA programs only.

Rationale: Ys need to be aware of the liability and operational risks when considering operating a non-YMCA-owned aquatic facility. Refer to [Operating a Non-YMCA-Owned Aquatic Facility: Considerations for YMCAs](#) for further information.

Outside Group Rentals. Have outside groups renting the YMCA pool

- sign the YMCA’s facility-use agreement, which also should be signed by association leadership; and
- provide a certificate of insurance and name the YMCA as additionally insured on the group’s insurance with the proper endorsement attached.

Procedures Review. Have Y aquatic leadership monitor, evaluate, and modify procedures on an ongoing basis to ensure safety and loss prevention.

Risk Assessments. Have Y aquatic leadership conduct periodic risk assessments to ensure compliance and effectiveness during the year in the following areas:

- Supervision
- Training
- Facilities and equipment

Risk-Management Plan. Have in place a written risk-management plan incorporating all recommendations found in Y-USA’s *Aquatic Safety Guidelines for Ys*.

Safety and Policy Review. Have a comprehensive safety and policy overview conducted annually by Y aquatic leadership. Conduct the overview in conjunction with the Executive Director, Associate Executive Director, or a corporate management representative well versed in aquatic safety to identify, analyze, and minimize risk that can result from the aquatic facility, its usage, and operations. Perform this overview for

- Y programs and activities;
- outside organizations using Y pools; and
- off-site aquatic facilities used for Y programs and activities.

Vendor Agreements. When using contractors and pool chemical suppliers or vendors, be sure to do the following:

- Have signed agreements in place that indemnify, defend, and hold harmless the YMCA.
- Ensure the YMCA is named as additionally insured by endorsement on the contractor’s, supplier’s, or vendor’s insurance.
- Obtain a proper certificate of insurance and additionally insured endorsement from the contractor, supplier, or vendor.

SECTION 6 – SPECIFIC ENVIRONMENTS AND ACTIVITIES

Some environments and activities pose unique challenges that require a specific approach to aquatic safety. This section includes additional guidelines for special environments commonly found in a YMCA and is intended to be used in conjunction with sections 1 through 5.

COMPETITIVE SWIMMING AND DIVING

Coach Safety Certification. In the interest of maintaining the highest level of safety, have all coaches who work with competitive swimmers be trained in [child abuse prevention](#) and hold current certifications in the following areas:

- [Basic life support](#) or [professional rescuer CPR/AED](#) certification—renewed annually
- [First aid](#) certification
- American Red Cross’s [Safety Training for Swim Coaches](#) or [YMCA Aquatic Safety Assistant \(YASA\)](#) or [YMCA Lifeguard](#) (or equivalent lifeguard training certification) with proof of successful completion of the “Safety Training for Swim Coaches Online Content Only” course (see YMCA of the USA’s [Certification Requirements for Swim Coaches](#) for additional information)
- [Principles of Competitive Swimming & Diving](#)

Diving. Allow diving instruction from the side of the pool, such as long shallow dives or standing dives, only in water that is at least nine feet deep. Competitive swimmers proficient in such dives can then perform racing starts during swim practice or competition only in water that is at least five feet deep at the starting end of the pool. If the water is less than five feet deep, have swimmers begin the race in the water and perform a push start from the side of the pool.

Specific Safety Guidelines. If your Y has competitive swimming and diving programs, follow all additional safety guidelines as indicated in the [Swimming Addendum to the Rules that Govern YMCA Competitive Sports](#).

Starting Blocks. Use starting blocks only under the supervision of the coaching or instructional staff. When not in use, always [cover or restrict starting blocks](#) to prevent unauthorized and untrained access.

Rationale: In *Diving Injuries: Research Findings and Recommendations for Reducing Catastrophic Injuries* (Gabrielson, McElhaney, & O’Brien, 2001), the editors reviewed 32 cases of spinal injuries associated with starting blocks. Of these incidents, all 32 cases were in water depths of four feet or less. Of these cases, 28 involved members of a swim team, with four cases involving recreational swimmers “trying out the starting blocks because they had seen others do it.” The editors concluded that starting blocks should be placed in water depths of at least five feet.

Supervision. Ensure that all competitive swimming and/or diving practices and competitions are actively supervised at all times by a lifeguard whose sole responsibility is to fulfill **lifeguard duties**. Do not have a coach serve simultaneously as a coach and lifeguard.

Rationale: The duties of coach and lifeguard are task specific and require dedicated focus if they are to be performed effectively and safely.

SPAS AND WHIRLPOOLS

Components. Equip all spas and whirlpools with the following:

- Emergency cut-off switch located in the spa area
- Emergency vacuum release system
- Two main drains that are compliant with the Virginia Graeme Baker Pool and Spa Safety Act

Draining and Filling. Drain and refill all spas and whirlpools weekly.

Signage. Post signage at all spas and whirlpools informing users of the potential risks of use, including restrictions related to the following:

- Minimum age
- Time limit
- Certain medical conditions

Supervision. Ensure that all spas and whirlpools are located where they can be supervised by lifeguard staff.

Temperature. Ensure that spa and whirlpool temperatures do not exceed 104°F.

Rationale: Using spas and whirlpools increases the risk of heat-related emergencies and complications to existing medical conditions due to exposure to high temperatures. See the YMCA of the USA (Y-USA) Medical Advisory Committee's statement on the [Use of Saunas, Steam Rooms, and Whirlpool/Hot Tubs in YMCAs](#) for more information.

Timer Switches. Ensure that all spas and whirlpools are equipped with timer switches that restrict jet action to 10 minutes. Position these switches where users must exit the water to reactivate the jet action.

Rationale: Using spas and whirlpools increases the risk of heat-related emergencies and complications to existing medical conditions due to heat exposure. Limiting the time users are in the spa or whirlpool reduces the risk of such emergencies. Review the Y-USA Medical Advisory Committee's statement on the [Use of Saunas, Steam Rooms, and Whirlpool/Hot Tubs in YMCAs](#).

WATERFRONT FACILITIES

Activity Areas. Clearly divide waterfronts into separate areas for different activities, such as boating and swimming.

American Camp Association Guidelines. Ys owning or managing waterfronts are encouraged to follow the American Camp Association's (ACA) guidelines (Visit [ACA's website](#) for information

on how to obtain a copy of their guidelines). In the event of a conflict with YMCA of the USA's *Aquatic Safety Guidelines for Ys*, follow the more stringent guideline.

Compliance. Comply with local, state, and federal health and safety codes and ordinances in the operation of waterfront facilities at all times.

Electrical Safety. For waterfronts that have a dockside power supply, ensure that the power supply is properly protected.

Equipment. Ensure that all waterfront beaches have the following [environment-specific equipment](#) readily available in a quantity appropriate to the geographic size of the facility and its attendance. (This is in addition to the required equipment outlined in [section 1 – Administration, Aquatic Operations](#).) Conduct documented inspections daily of all equipment, including the following:

- Buoys and safety floats that are properly secured, have no sharp edges, and have legible markings to indicate the swim area
- Communication equipment
- Legible and adequately secured rules and warning signs
- Mask, fins, and snorkel
- Paddleboard (rescue board)
- Tag board (buddy board) with at least one tag per swimmer

Life Jackets. Require life jackets during all boating-related activities.

Maintenance. Whenever equipment such as docks, diving boards, ladders, rafts, and similar structures are provided, ensure they are in proper repair and safe working condition.

Safety Boats. If permitted by the local or state regulatory ordinances, waterfronts are advised to have a motorized safety boat available.

Structure and Equipment Access. Control access to all waterfront-related structures and equipment, which includes securing such structures and equipment after hours.

Tag Boards (Buddy Boards). Implement the use of tag (or buddy) boards to help lifeguards and safety assistants quickly account for all participants in swimming and boating activities.

United States Lifesaving Association Guidelines. Ys owning or managing open water and surf environments are encouraged to follow all guidelines and standards as indicated by the [United States Lifesaving Association \(USLA\)](#).

Water and Bottom Condition Inspections. Each day, perform and document inspections of water and bottom conditions. Include accuracy of depth markers; debris on the bottom; holes and sandbars; currents; tides; wave size, direction, and type; **thermocline**; and weather conditions.

Waterborne Illnesses. Adopt preventive measures to minimize exposure to waterborne illnesses.

Waterfront Hazard Inspections. Conduct and document daily inspections of waterfront beaches for any unusual hazards, and mitigate any hazards prior to use.

Waterfront In-Service Training. For all Y-managed waterfronts with Y-employed lifeguards, provide additional in-service training specific to the waterfront environment for those lifeguards.

Waterfront Lifeguard Training. Use lifeguards who have additional training in waterfront-specific skills from a nationally recognized agency.

WATER SLIDES AND PLAY STRUCTURES

Lifeguard Positioning. Position a slide attendant/dispatcher at the entry of the slide. Position a lifeguard at or in the catch pool or run-out of the slide.

Manufacturers' Recommendations. Follow all manufacturers' recommendations for all play equipment installed at the aquatic facility, including, but not limited to,

- removable inflatable play structures;
- permanently fixed play structures; and
- temporary or removable play structures.

Play Structures Hazards. Evaluate hazards associated with existing and new play structures, and staff the pools accordingly. Develop policies regarding the use of life jackets and minimum swimming ability requirements per play structure.

Slide Height Requirements. Enforce the manufacturers' height requirements for users of slides and develop minimum swimming criteria for their use.

CAMPS AND CHILD CARE

Field Trips. For field trips, when using an aquatic facility that is not owned by your Y, establish minimum criteria for its use and tour the facility prior to use for evaluation against the criteria.

Field Trip–Specific Training. When using a non-YMCA-owned aquatic facility for field trips, ensure that Y program staff receive training in the following prior to arrival at the venue:

- Additional supervision responsibilities specific to the venue
- Emergency procedures in the event of an injury or a submersion incident
- Procedures in the event of a missing participant

Program Staff Training. In order to assist lifeguards in an emergency involving camp or child care participants, establish program staff like camp counselors and child care teachers as designated nonaquatic support staff and train them as found in section 2 – Designated Nonaquatic Support Staff. Additionally, ensure that program staff receive additional training for the following:

- Aquatic safety policies and procedures for non-YMCA-owned aquatic facilities
- Implementation and enforcement of the buddy system
- Program-specific aquatic safety policies
- Their role in swim testing procedures
- Specific supervision responsibilities for the aquatic facility
- Supervision of children who are not actively swimming

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DEFINITIONS

30/60/90-day training plan – A plan that outlines the continued development of a staff member along a predetermined period of time, such as 30 days, 60 days, and 90 days

active supervision – Lifeguards' state when they are fully involved and engaged, scanning, alert, ready to respond, in full control, and constantly aware of swimmers' presence and activity on and below the water's surface, on the pool bottom, and on the pool deck in the assigned zone of responsibility

Americans with Disabilities Act (ADA) – A wide-ranging civil-rights law enacted by the U.S. Congress in 1990 that prohibits, under certain circumstances, discrimination based on disability and prescribes certain requirements for facilities

aquatic leadership – An individual(s), employed by a Y, with aquatic supervisory responsibilities as a primary job function

Centers for Disease Control and Prevention (CDC) – A U.S. federal agency under the Department of Health and Human Services based in Atlanta that works to protect public health and safety by providing information to enhance health-related decisions; promoting health through partnerships with state health departments and other organizations; and focusing national attention on developing and applying disease prevention and control (especially infectious diseases), environmental health, occupational safety and health, health promotion, injury prevention, and education activities designed to improve the health of the people of the United States

emergency action plan (EAP) – A written plan that defines the action steps staff must perform in the event of an emergency and defines communication protocols and cross-departmental procedures

Environmental Protection Agency (EPA) – A U.S. federal agency charged with protecting human health and the environment by writing and enforcing regulations based on laws passed by Congress; conducting environmental assessment, research, and education; and setting and enforcing national standards under a variety of environmental laws, in consultation with state, tribal, and local governments

footcandle – Illumination measurement determined by a light meter

hazard communication standard – Also known as the *right-to-know standard*; required by the Occupational Safety and Health Administration (OSHA) for all facilities using hazardous chemicals; requires employers to inform and train staff about the hazards of the chemicals they work with and how to take appropriate precautions

in-service training – Training focused on the review and improvement of skills and knowledge as well as introducing new concepts that can also be tailored toward facility-specific skill development

lifeguard duties – Any responsibilities and actions involving patron surveillance; emergency response; or the use of water-rescue, CPR, or first aid skills

lifeguard quick checks – Quick assessments and observation of lifeguards by nonlifeguard staff, nonaquatic staff, and patrons to ensure that lifeguards are rescue ready and the aquatic environment is safe

manufacturers' equipment manuals – Original documentation, including updates, supplied by the equipment manufacturer that includes installation and operation instructions, routine and preventive maintenance instructions, and parts lists for repairs

Model Aquatic Safety Performance Criteria for Nonaquatic Staff – A set of criteria, developed by YMCA of the USA, which can be added to job descriptions of nonaquatic staff employed by a YMCA

nonaquatic support staff – Staff, such as front desk or program staff, who are tasked in a facility's EAP with supporting aquatic staff in the event of an emergency

orientation – The process of acquainting new staff with the history, culture, procedures, policies, and practices of an organization with the goal of preparing them to serve effectively in their role

Occupational Safety and Health Administration (OSHA) – The U.S. federal agency dedicated to preventing work-related injuries, illnesses, and occupational fatalities by issuing and enforcing standards for workplace safety and health

personal protective equipment (PPE) – Devices and clothing designed to be worn or used for the protection or safety of an individual while in potentially hazardous areas or performing potentially hazardous operations

pool operator – An appropriately trained staff member who understands the proper management of water and facility operation and who is responsible for water quality control; system component maintenance; and compliance with statutes, administrative codes, regulations, and commonly accepted practices

reach supervision – Type of oversight where a parent or legal guardian is within arm's reach of a child when in an aquatic facility (see a [visual example of reach supervision](#))

records retention policy – Internal policy that prescribes the length of time a record must be kept on file and includes a document retention policy so that no documents are destroyed in the event of litigation

recreational water illness – A disease caused by pathogens spread by swallowing, breathing in mists or aerosols of, or having contact with contaminated water in swimming pools, hot tubs, waterparks, water play areas, interactive fountains, lakes, rivers, or oceans that can involve a wide variety of infections, including gastrointestinal, skin, ear, respiratory, eye, neurologic, and wound infections

rescue ready – The state of a lifeguard who is stationed in a lifeguard chair or on the deck; carries a rescue tube or buoy, PPE, and a summoning device; is readily identifiable as a lifeguard; and is properly positioned for swimmer supervision, rescues, and other emergency care (see a [visual example of a lifeguard who is rescue ready](#))

rescue reports – Documentation of rescues or incidents that involve a lifeguard assisting a patron in the water

response readiness – A level of physical, mental, and environmental readiness to respond to an emergency

rotation – The movement of a lifeguard from one lifeguard station to another during a set time schedule

safety data sheets (SDS) – Important components of product stewardship and workplace safety that provide data on the properties of a particular substance or chemical; procedures for handling or working with a substance in a safe manner for workers and emergency personnel; and information such as physical data (e.g., melting point, boiling point, flash point), toxicity, health effects, reactivity, storage, disposal, protective equipment, spill-handling procedures, and appropriate first aid measures; can vary from source to source within a country depending on national requirements

safety plan – A written document that describes procedures, requirements, and/or standards related to safety for aquatic facility staff to follow and that includes training, emergency response, and operations procedures

scanning – A system of visual observation in which lifeguards perform systematic visual sweeps of the facility, its patrons, and their activity

special or outside group – A group of individuals using a Y for a special event, recreational swimming, instructional programming, or other contracted service; may include YMCA programs, such as early learning, camp, and afterschool

summoning device – A device used to activate the EAP; commonly a whistle, but may also be a wall alarm that can be activated by pressing a button or a personal wireless device worn by lifeguards that is activated when they enter the water

swim test – A swimming ability test that determines an individual's swimming proficiency

thermocline – A thin but distinct layer in a large body of fluid (such as an ocean or lake) or air (such as an atmosphere) in which temperature changes more rapidly with depth than it does in the layers above or below

Virginia Graeme Baker Pool and Spa Safety Act – A law designed to prevent drain entrapments and eviscerations in pools and spas that became effective on December 19, 2008

zone – Assigned area of coverage a lifeguard is responsible for scanning and supervising

zone validation plan – A process that determines lifeguard positions based on the number of swimmers (i.e., bather load), type of activity, water depth, blind spots, glares, and any other factors that may affect lifeguard placement