



United States Lifesaving Association

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Guideline: Open Water Swimming Event Safety

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Introduction

The United States Lifesaving Association (USLA) recognizes the many benefits to human health and safety derived from events, contests, and races held in the open water environment. In the interests of safety of all participants in such events, after soliciting broad input, the USLA has developed these minimum recommended guidelines to assist permitting authorities, aquatic safety providers, sanctioning bodies, and race/event promoters overseeing events in bodies of water other than pools. The USLA stresses that these are recommended minimum guidelines which should be exceeded in accordance with local conditions and past experience. Broad national guidelines cannot fully address the circumstances in every locale.

Although the USLA is the recognized provider of standards for aquatic safety in the surf environment, the USLA acknowledges that other bodies, primarily the American Red Cross and YMCA of the USA, as does the USLA, issue standards for aquatic safety in the inland, non-surf environment (stillwater). While the USLA's standards are generally the most stringent, there may be a desire to employ standards provided by other nationally recognized organizations in the stillwater environment. These guidelines should be utilized only in conjunction with the training and standards of the aquatic safety providers used at an event and within the scope of the provider's abilities to proficiently rescue the participants. These are minimum recommended guidelines for promoting reasonable levels of event safety. They do not ensure absolute safety. The USLA recognizes that variances in local conditions, environment, and organization may

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require that these minimum recommendations be exceeded and encourages more stringent safety levels.

Guidelines

1. Definitions

- 1.1. Recognized Lifeguard Training Organization: A nationally recognized body which sets standards for the training of lifeguards and aquatic rescuers, such as the United States Lifesaving Association, American Red Cross, or YMCA of the USA.
- 1.2. Trained Lifeguard: A lifeguard currently trained and certified to provide aquatic safety in water conditions consistent with those where the event will take place by a recognized lifeguard training organization. In the case of USLA, the lifeguard must be currently employed by a USLA certified lifeguard agency. In cases that a lifeguard agency has jurisdiction over the area where the event will take place, that agency should take the lead in providing trained lifeguard personnel for the event and should be reimbursed in accordance with local practice and prior agreement with the race director.
- 1.3. Swim Safety Coordinator: The person directly responsible for aquatic safety at the event. This person must be a trained lifeguard with supervisory experience or a person with management level experience overseeing aquatic safety services involving trained lifeguards, either of which in the environment where the event will take place (e.g. surf beach or stillwater). (Note: A title other than Swim Safety Coordinator may be preferred and substituted. We use this term as an example.)
- 1.4. Personal Escort: An individual with a boat or other similar conveyance with the competence to easily shadow a single competitor and provide immediate aid until a trained lifeguard can assist. Personal escorts, also known as swim angels, must recognize the authority of the lifeguard and be instructed that their participation is always subordinate to the lifeguard, agency and sanctioning organizations.
- 1.5. National Race Sanctioning Organization: Organization such as United States Swimming (USA), United States Masters Swimming (USMS) or United States Triathlon Association (USAT).
- 1.6. Personal Safety Device. A device developed and attached to individual competitors with the intent of providing immediate swim or floatation aid.
- 1.7. Stillwater: Open water environments such as lakes, rivers, reservoirs or other bodies of water where a competition might occur but do not have surf conditions.

2. Management

- 2.1. Swim Safety Coordinator: A 'Swim Safety Coordinator' independent of the Race Director, must be appointed. All aquatic safety issues should be assigned to the Swim Safety Coordinator, who should have authority to ensure that aquatic safety directives are observed. In cases where there is an overall Event Safety Coordinator, the Swim Safety Coordinator should coordinate with the Event Safety Coordinator. The Swim Safety Coordinator will be responsible for reporting any issues that compromise safety to the Race Director and/or event Safety Coordinator and taking necessary, mitigating

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actions to ensure adequate levels of safety. The Swim Safety Coordinator must be present at the swim event and must be acting solely as the Swim Safety Coordinator (i.e. not as a swimmer or lifeguard). The Swim Safety Coordinator must have sufficient authority to cancel or change an event based on swim safety issues.

2.2. Water Safety Plan: The Race Director and the Swim Safety Coordinator should meet with all providers of public safety for the event to develop a pre-event safety plan and an emergency action plan for worst case scenarios.

2.2.1. Pre-event swim cancellation criteria and plans should be developed with clear lines of authority that prioritize safety.

2.2.2. The emergency action plan must include rules under which the swim will be terminated upon any credible account of a missing swimmer and that a search will be conducted consistent with USLA protocols (see Open Water Lifesaving – The United States Lifesaving Association Manual, Chapters 16 and 17). In case of a water evacuation or cancellation, or the removal of a swimmer, the situation should be coordinated with the communications center. The plan should consider the location, access by rescue craft and the difficulty of removing active competitors.

2.2.3. A warning/waiver, with appropriate personal emergency information, should be developed jointly, well in advance of the event, and include notification of local hazards and conditions.

2.2.4. Pre-race instructions for safety issues should be developed as part of the Water Safety Plan (including water testing).

2.2.5. The Water Safety Plan should include safety at both the start and finish of the race, as well as along the entire course.

2.2.6. A swim cut-off time should be determined in advance and published in event promotion materials.

2.2.7. Rules, Regulations and Safety guidelines of the national or regional sanctioning organization must be included as part of the water safety plan.

2.2.8. Every agency involved and the event organizer should meet immediately following the event to conduct an operational debriefing of the event. Lessons learned should be drafted to improve the safety of future events.

3. Lifeguards

3.1. All lifeguard personnel should be trained lifeguards whose training is specific and appropriate to the location of the event. When staffing permits, lifeguards should be employed by the agency with jurisdiction over the event. Rescue boat operators should be appropriately trained and equipped in accordance with standards promulgated by the lifeguard agency with jurisdiction or, if there is no lifeguard agency with jurisdiction, then in accordance with pertinent local, state, and national standards.

3.2. Staffing Levels

3.2.1. Determining appropriate lifeguard staffing levels is critical to event safety. There are many variables that should be considered in this determination and no single

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benchmark will be appropriate in every case. The appropriate level for each event can and should be adjusted in accordance with a variety of factors. These include, but are not limited to:

- Past experience for the same or similar events
- Number of participants
- Length of swim course
- Participant Start System Type (wave, mass interval, etc.)
- Design of swim course
- Proximity of the swim course to shore
- Shoreline conditions such as rocks, walls or vegetation
- Anticipated surf size
- Swimming ability of the participants
- Presence or absence of a pre-qualifying swim
- Beach conditions
- Surf and surface conditions
- Water temperature, including water quality and clarity
- Currents
- Weather conditions, including wind and fog

Length, water temperature, surface conditions, competitor ability, etc. must be evaluated as part of the Water Safety Plan and staff ratios determined in the favor of the safety of the competitor, providing more, not fewer lifeguards. USLA encourages higher ratio levels, more lifeguards rather than fewer lifeguards, when practical. These higher ratios must be implemented when conditions such as higher than normal surf, rip currents, wind, fog, water temperature or other similar issues are present and in the professional view of the lifeguard agency are warranted.

3.2.2. For races or events that extend away from the shoreline and exceed two and one-half miles personal escorts should be required for each swimmer.

3.2.3. On the day of the event, the Swim Safety Coordinator must make an evaluation as to whether the preplanned number of lifeguards is still appropriate for existing conditions. Weather, currents, surf, and water temperature, for example, may cause a need for an increase in the number of lifeguards needed relative to the number of competitors in the water at any one time.

3.3. Staff should be strategically placed along the course to ensure continual observation of all competitors and immediate response to the need for assistance. Methods of observation may vary from fixed posts to mobile guards and should ensure that all portions of the course can be directly observed.

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3.4. It is strongly advised to arrange for water-based patrol of law enforcement officials to keep the course clear and safe from boaters or other intrusions.

4. Medical Services

4.1. An event Medical Director should be assigned to oversee planning and on-site oversight of the event. This person should, at minimum, be a paramedic, but should ideally be a physician with training and experience in emergency medical care at multi-sport events or for events exceeding 500 swimmers.

4.2. All lifeguards assigned to the event should be currently trained in CPR and first aid and meet current standards in the state of employment as a lifeguard in the open water/surf environment.

4.3. No less than one Emergency Medical Technician (or a person with higher emergency response expertise) should be available for every 150 swim event participants. Each EMT should have access to all appropriate emergency medical equipment.

4.4. Medical evacuation from the water to land based emergency medical services assigned to the event should be able to be conducted in 10 minutes or less.

4.5. At least one advanced life support emergency response unit must be made available onsite or within a five-minute response time for the purposes of evacuating patient(s) to a hospital. Additionally, at least one ambulance/paramedic unit for each group of 250 competitors should be made available. Where a hospital emergency room is more than one half hour away, air evacuation procedures should be planned at a location proximal to the race to manage medical issues.

4.6. Radio communication between the medical group and the Swim Safety Coordinator should be maintained throughout the event.

4.7. A designated medical area should be established with a tent or other means to shelter patients from the environment and to maintain patient privacy. In races where temperature from the air or water environment could be a significant factor in medical issues, provision should be made to provide medical assistance to such cases such as warming showers or warming equipment in races where water temperatures or race length may indicate hypothermia as a risk factor for competitors.

5. Equipment

5.1. Lifeguards: Each lifeguard along the swim course should be equipped with an observation platform which the lifeguard is trained and competent to use, such as a lifeguard tower, rescue board, or shared use of a rescue boat, as well as a rescue floatation device (rescue tube or rescue buoy).

5.2. Rescue Boats: For swim events that will extend more than 50 meters from shore, particularly where surf or currents are present, motorized rescue boats which include personal rescue watercraft should be available and staffed by trained operators. The water safety plan should include provisions for summoning additional rescue craft, such as the Coast Guard or harbor patrol, as needed in major emergencies. (Note: Some National Sanctioning organizations place additional restrictions on private motorized rescue craft and should be consulted). Where an event occurs in a body of water with restricted access to shore or a safe extrication point, an appropriate plan should be

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designed to ensure that athletes in need of emergency attention can be extricated appropriately and quickly. Obstacles to extrication may include: limited access for emergency vehicles preventing the lifeguard's ability to get the victim to advanced life support, or the shoreline does not allow extrication of the victim due to vegetation, walls, or rocks. If local regulations prohibit certain types of equipment (i.e. environmental restrictions on power craft) other effective safety rescue tools must be considered.

- 5.3. Communications: A dedicated race control communications system should be employed and should be available for all race functions. A public address system capable of reaching the majority of the beach or staging area with sufficient amplified strength should be available.
 - 5.4. Command Center: A command center that functions as a central communications point and a central observation location for the event should be established.
 - 5.5. Swimmer Identification: Swimmers should be required to wear fluorescent or other brightly colored swim caps and all competitors should be individually numbered, with numbers marked on the swimmers' bodies in a manner that can be easily observed. Duplicate numbering in more than one area may be useful.
 - 5.6. Map: A large course map should be provided to swimmers prior to the event.
 - 5.7. Wetsuits: As a precaution against temperature-related illness or injury, participants should be advised of anticipated water temperature in advance and should be encouraged or discouraged to wear wetsuits as appropriate to the water temperature, participant acclimatization, and policies established by the National Race Sanctioning Organization.
 - 5.8. Non-Motorized Rescue Craft: These craft must be consistent with current USLA lifeguard practice, such as rescue boards, dories or ocean kayak. For example, river kayaks, which are prone to capsize, would be unacceptable.
 - 5.9. Personal Safety Devices (PSD): Event directors, in conjunction with the Swim Safety Coordinator should evaluate and consider the efficacy of commercially available PSDs for the event. PSDs should not be considered a substitute for lifeguards nor justification to reduce the number of lifeguards required to oversee the event. PSDs may enhance safety by providing participants immediate access to flotation and, in some cases, may provide a marker to expedite search and rescue.
6. Safety Procedures
- 6.1. A safety briefing should be given to all swimmers. Swimmers should be briefed on potential hazards and instructed on hand signals to lifeguards, should they need rescue, and discouraged from jokingly calling for help. Swimmers should be instructed that if they don't start the event or if they drop out prior to completing the swim, it is essential that they notify event staff to avoid unnecessary emergency procedures and the possibility of event cancellation.
 - 6.2. Lifeguards should be trained in pre-agreed hand signals to summon assistance from rescue boats and other rescuers as dictated by USLA protocol (see Open Water Lifesaving – The United States Lifesaving Association Manual – Appendix A).
 - 6.3. Rescue boat operators should be counseled to operate in close, but safe proximity to the participants, while making every reasonable effort to avoid allowing fumes or expended

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petroleum from affecting participants. For example, staying down-current and/or downwind from competitors may help avoid competitor concerns.

- 6.4. In order to quickly identify a missing swimmer, an accountability system should be rigidly arranged and coordinated by the Race Director to tabulate the number of swimmers entering and exiting the water, and to ensure that all persons are safely ashore. The ideal system will include identification of each race participant by number and name. Identifying the exact person missing is extremely helpful in conducting an efficient search, which includes contacting the person's residence to make missing person notification and to ascertain whether they may have simply departed unannounced.
 - 6.5. The course should be inspected for hazards, obstacles and other problems immediately before the race. A bottom survey should be conducted at entry and exit points and the results should be part of the safety briefing for competitions. Water temperature, water conditions, and weather forecasts should be evaluated to ensure they are within the water safety plan guidelines.
 - 6.6. The course should be appropriately marked, with adequate buoys or markers and anchor systems to ensure clarity of course for the swimmers, to avoid swimmer misdirection, and ensure the lifeguards can remain focused on swimmer safety. The first turn of the swim event should be located an adequate distance from the start to ensure that swimmers are spread out enough prior to the turn to reduce the chance of collisions. Sharp turns should be minimized in favor of rounded turns to avoid or minimize bunching and collisions.
 - 6.7. Participants should be advised in all safety literature and announcements that diving into shallow water is dangerous and strongly discouraged. The start should ideally be in water deep enough to prevent shallow water diving if conditions allow.
 - 6.8. Wave starts are strongly recommended to reduce congestion, collisions and other bodily contact. This should be discussed and decided prior to the event. Provisions for adequate lifeguard coverage of each wave should be planned.
7. Water Quality
- 7.1. The water body should be tested as appropriate for recreational water contact based on federal standards or, if they are more stringent, local protocols, as close to the start of the event as possible so long as results will be available prior to the event. The state or local board of health is the best option in this regard. Results of water testing should be made available to all requesting participants and if the water quality is unacceptable, cancellation or relocation should occur, or competitors should have the option of refraining from swimming. Rain or other environmental changes may cause the need for immediate retesting or cancellation of the swim.