# Itinerary - Refugio JG Assistant Training

**Date:** June 19st, 2020 (Friday)

**Time:** 0900 – 1700

**Location:** Refugio State Beach

**What to Bring:** Swimsuit, wetsuit, towel, comfortable clothing, large lunch, lots of water, & sunscreen

**Contact:** JG Cell Phone - (805)331-8018

| Time | Activity/Event | Location |
|---|---|---|
| 0900 | Welcome/Overview | Refugio |
| 0930 | 500 Yard Timed Ocean Swim | Refugio |
| 1000 | Break | Refugio Ed Center |
| 1015 | Mock Rescue Practice | Refugio |
| 1115 | Mock Rescue Practical Exam | Refugio |
| 1145 | Lunch | Ed Center |
| 1230 | Review for Written Exam | Ed Center |
| 1300 | Written Exam | Ed Center |
| 1345 | Break | Ed Center |
| 1400 | Child Abuse Recognition Video | Ed Center |
| 1430 | Issue Uniforms | Ed Center |
| 1445 | Code X Video | Ed Center |
| 1500 | Go over Trailer and Equipment | Ed Center |
| 1515 | Group Assignments/Debrief/Q & A | Ed Center |
| 1530 | Dismiss | Ed Center |
| | | |
| | | |

*Remember, this is a mandatory training for all aspiring Assistant Candidates. All events (written and practical) are competitive and positions may not be offered to everyone who attends. The number of positions will be based solely on the strength of each candidate and the needs of the organization.

# Refugio
# Junior Lifeguards

**California State Parks**
**Channel Coast District/Santa Barbara Sector**

# Assistant Training Manual

## MISSION AND PURPOSE

## MISSION OF THE CA STATE PARKS

The mission of the California Department of Parks and Recreation is to provide for the health, inspiration, and education of the people of California by helping to preserve the State's extraordinary biological diversity, protecting its most valued natural and cultural resources, and creating opportunities for high quality outdoor recreation.

In keeping with this mission, the Refugio Jr. Lifeguard program provides quality water safety and environmental education to children in and around Santa Barbara County.

## PURPOSE OF THE REFUGIO JG ASSISTANT PROGRAM

Whether volunteer based or a paid position, the purpose of the Jr. Lifeguard Assistant Program is to provide a job development program for youth, ages 15-17 years of age. On a daily basis, the Assistants help to provide for a safer, better supervised, outdoor recreational experience for the Jr. Lifeguard program participants. They also become role models for program participants, while they themselves gain training and experience in leadership, teamwork, aquatic safety skills, and first aid.

The Jr. Lifeguard Assistants work under the close supervision of the Jr. Lifeguard Program Supervisor and report directly to an assigned Jr. Lifeguard Program Instructor during the operating hours of the program. The Assistants will work with Lifeguard staff and other Park Personnel in order to develop job skills, proper work habits, and leadership qualities through work experience.

## A MESSAGE TO ALL ASSISTANT CANDIDATES

You have been selected above other Jr. Lifeguards to take part in a training program designed to provide you with the skills needed for future service as a professional Ocean Lifeguard. The training curriculum for this position mirrors to a slightly lesser degree the process of testing, training, and hiring of Professional Lifeguards. Your attitude, behavior, and work ethic are a reflection of the California State Parks and the Refugio Jr. Lifeguard program. Therefore, you are expected to conduct yourself in a manner which brings credit upon the California State Parks, the Refugio Jr. Lifeguard program, and yourself. At times this program may be quite challenging and/or intensive, and will require your full and undivided attention. It is imperative that you understand that you will be expected to perform your duties with the utmost dedication and professionalism each and every day. Remember that you have been selected for a program that has produced many of the finest Lifeguards in the state. So good luck, and have a great summer!!!

**Study all areas of this manual thoroughly as you will be tested physically and academically at the 6-hour Assistant Training.**

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# I. ROLE OF THE PROFESSIONAL LIFEGUARD

## A. RESPONSIBILITIES & EXPECTATIONS

Unlike untrained citizens who may bravely or impulsively respond to an unexpected emergency, professional lifeguards are specially prepared to prevent, anticipate, and responds to emergencies in and around the aquatic environment.

Most lifeguards who spend any significant time in the profession will perform countless lifesaving acts with little recognition or expectation thereof. This is as it should be, since a lifeguard who is properly trained and prepared will prevent loss of life as a daily routine**. It is, after all, the basic job of a lifeguard to help ensure that those who visit the nation's beaches, waterways, and adjacent parks return home alive and uninjured.** Not all accidents can be prevented, but well trained professional beach lifeguards rescue tens of thousands of people from drowning in America each year, and perform many times that number of preventative actions to intervene before emergencies develop.

In the United States, beach lifeguards have worked hard to be recognized as equals to other emergency services professionals. This has been accomplished through a steady process of improving the quality of the services provided and a constant dedication to public safety. As a result, Americans have come to expect professional lifeguards on their beaches just as they have come to expect professional police, fire, and emergency medical services in their communities.

Lifeguarding is viewed by many as the most physically demanding job among the various emergency services. This is because, unlike other emergency services which are able to rely heavily on mechanized support, lifeguarding in its purest form comes down to a simple struggle against the forces of nature by one human being endeavoring to save the life of another. Even with new developments in motorized rescue equipment, many rescue situations depend on the sheer strength, physical endurance, and swimming skills of the lifeguard.

## B. THE LIFEGUARD CODE OF ETHICS

In recognition of the fundamental responsibilities of a professional beach lifeguard, the trust and confidence placed in the lifeguard, and the unwavering devotion to duty required of the lifeguard, all lifeguards must adhere to certain ethical principles and standards of behavior.

**Lifeguards will at all times adhere to the following as part of their standard operating procedures:**

- Maintain an unwavering dedication to the safety of those they are assigned to protect.
- Recognize and accept that certain types of personal dangers are an unavoidable aspect of the job.
- Maintain high standards of fitness, recognizing that their strength, stamina, and physical skill may mean the difference between life and death.
- Make every reasonable effort to prevent accidents before they occur.
- Avoid any undue distraction which may deter them from their primary responsibility.
- Proudly carry out the duties they are assigned, providing the highest possible levels of courtesy, respect, and assistance to those whom they watch over.
- Take proactive steps to educate the public about the hazards of the aquatic environment and ways to safely enjoy aquatic recreation.
- Promote their profession through personal actions which serve to demonstrate that lifeguards everywhere are deserving of the trust placed in them by the public they serve.

# II. OCEAN CONDITIONS

Ocean conditions are completely different from those encountered in a body of still water such as a bay, lake, or swimming pool. Powerful opposing forces are constantly at play. The surf, calm at one moment, can become rough and dangerous within hours. High winds and strong currents can dig channels in the ocean floor causing rip currents, while large waves can wreak havoc on swimmers and boaters. If the surf is calm, a single lifeguard can supervise hundreds of swimmers and waders successfully. But if the surf is violent, and rip currents are pulling, several lifeguards may have difficulty safeguarding the same number of individuals. **In order to effectively protect the millions of patrons who visit open water beaches every year, Lifeguards must have an adequate knowledge of the environment surrounding them.**

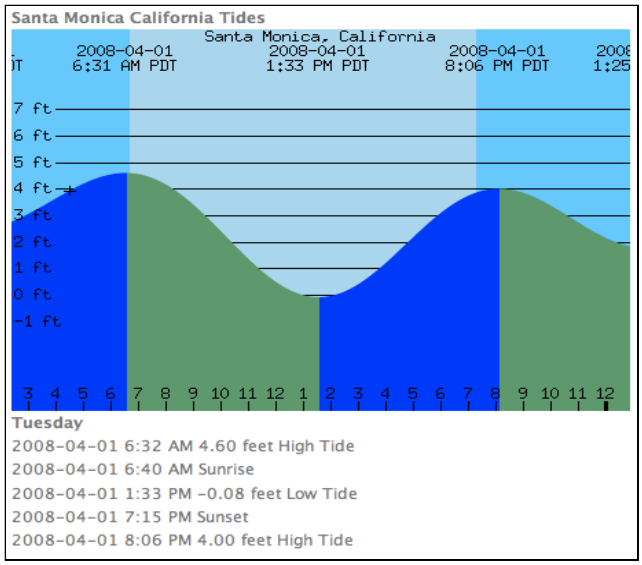
## A. TIDES

A tide is a regular rise and fall of sea level once or twice a day. At **high tide**, ocean water has moved in across the beach, or up a rocky shore. At **low tide**, the water has moved back out again. Tides result from the pull of the sun and moon's gravity. The tide is greatest during the full moon and new moon, when the sun and the moon are in line with the Earth.

Tides are actually waves with a very long wavelength. High tide is the crest, low tide is the trough, and the wavelength is half the circumference of the Earth. Along many of the Earth's coasts, the tide rises and falls about twice a day. Water depth, the shape of the

coastline, and other factors affect tides. This causes some locations to have only one tide a day, while others may have none at all.

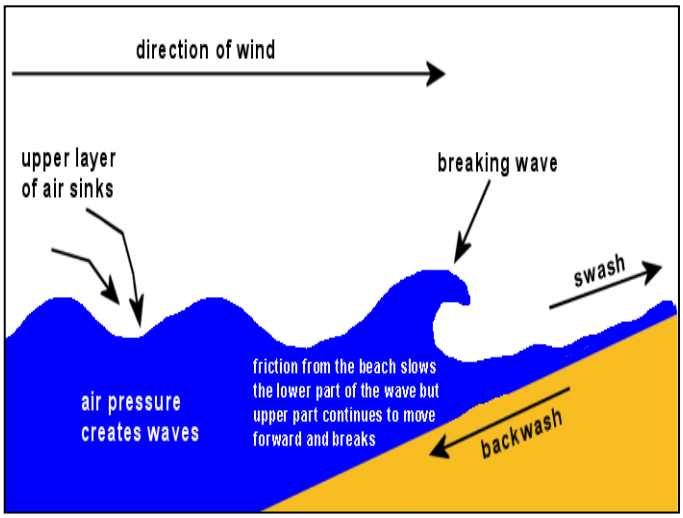
***What this means to lifeguards is that the tides will affect the condition of the waves, shoreline, and rip currents. Generally, rip currents pull more forcefully when the tide is dropping from high to low. On a day with extreme high and low tides mixed with surf, you can expect strong rip currents.**




## B. WAVES

**Wave action causes rip currents, backwash, sand bars, and other features on the surf beach that contribute to rescues.** On the Atlantic Coast, wave action is generally small and is directly affected by wind. On the Pacific Coast, waves are generated by stronger winds far out at sea. Wind generated waves can be local or travel thousands of miles across open ocean before finally breaking on some distant shore. **The wind's effectiveness in generating waves is due to three main causes: 1) the wind's speed, 2) the length of time the wind blows, and 3) the distance over which the wind blows (known as fetch).**

As the wind blows, it creates ripples on the surface of the water. The stronger the wind blows, the more water is pushed, and the wave builds until the crest of the wave reaches an unstable angle or a shallow ocean floor. This causes the waves to spill over and break. As waves move out and away from the wind that created them, the crests of the waves become more rounded and move in regular intervals and heights. Waves generated from distances far away with a long duration and fetch, is called a ground swell.




These waves are usually larger and have a characteristically clean shape, while waves generated by local winds (wind swells) are chaotic in shape and length. The shape of the ocean floor also has influence on the shape of the waves. When a large swell meets an underwater slope, the water is forced up, and the wave plunges over rapidly. These hard-breaking or crashing waves are formally termed **"plunging waves".** A shallow and gradual sloping bottom will form a gently spilling wave as it rolls towards the beach, commonly termed **"spilling waves".**

## C. RIP CURRENTS

**A rip current is the ocean condition most likely to cause difficulty for the average swimmer.** Rip currents are formed when waves break in shallow water with rapid succession. The water the rushes up on shore cannot easily return seaward because it becomes trapped, "piling up" inside the surf line near shore. When the collection of water gets too large, a current begins to flow out to sea.

The water will follow a path of least resistance, finding a hole or depression in the bottom that will allow the water to travel against the natural up-rush of water. As it moves, the water erodes a channel, allowing a continuous flow of water seaward, creating a rip current. The rip current is supplied water by "feeder currents" which collect water from incoming waves. Out beyond the surf line, the channel usually widens and deepens, and the strength of the rip current diminishes. **There are four general types of rip currents:**

- **Permanent rip currents**: these rip currents form as a result of a permanent structure in the water, such as a pier, jetty, or rock, and are stationary year round.

- **Fixed rip currents**: these rip currents pull offshore in a fixed location because the seasonal sand movements create a trench, or channel that is deeper than the surrounding water. This causes a rip current that may last for several days or weeks, then, will disappear, and return after a storm or swell has once again carved a depression in the ocean bottom.

- **Flash rip currents**: these rip currents are temporary as a result of an increased volume of water brought to shore by a larger set of waves. This type of rip current will "flash" up immediately after a set, and then disappear rapidly a few minutes later.

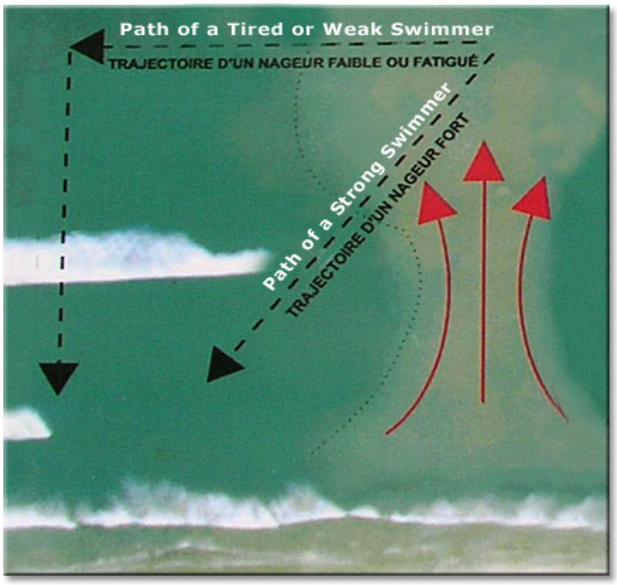
- **Traveling rip currents**: these rip currents flow out towards sea, but not due to a hole or depression in the bottom. They are pushed by the lateral (long shore) current, and can travel back and forth over an area of several hundred yards.

***Water in a rip current is generally discolored and has a dirty, sandy, appearance.** The discoloration is caused because sand is being churned up as the current moves out to sea. Occasionally, white caps will form in the center of a strong, fast moving rip current. Generally, rip currents will be easy to identify on calmer days. They are harder to spot on windy and choppy days, as the entire surface of the ocean may have the characteristic features of a rip current. Take a close look at the picture (right).

**Common characteristics of rip currents include:**

- **Choppy, brown, sandy water**
- **Water rippling in the opposite direction of the surrounding water**
- **Swimmers or body boarders moving backwards**
- **A cloudy or foamy area of water**
- **A mushroom-shaped appearance**

**All rip currents consist of three components: (1) the feeder, (2) neck, and (3) head.** The feeder is the main source of supply for the rip. It provides a suction that collects water gathered from expended waves, and begins to move it laterally along the shore, feeding the rip current. A rip current may have one or two feeders depending on the prevailing conditions. The neck portion of the rip current is the current of water running seaward.




**The vast majority of rescues and drownings occur in the neck.** This is where the rip current has the strongest flow. The head of a rip current is the area where the neck disperses into the ocean body. Having found deeper water, the rip current no longer needs to channel or collect. The "pull" of the rip current will dissipate at this point.

Rip currents pose a severe danger to swimmers, as they move away from shore, traveling into deeper water. The victim will attempt to fight the rip current to exhaustion. Lifeguards must be aware of the danger of rip currents, and scan to see if swimmers are entering the water or moving near a rip current. ***The simplest way for a swimmer to escape from the pull of a rip current is to swim parallel to shore, perpendicular to the pull of the rip current. This will allow the swimmer to move across the current instead of against it.**

## D. HEAVY SURF

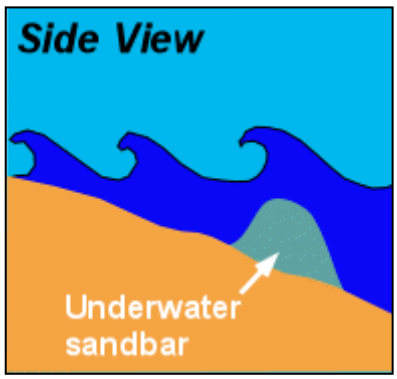
Heavy, high, or large surf can cause additional problems for most swimmers, particularly in the direction of the swell. These waves can pummel swimmers, knocking them off their feet, or causing them to tumble in the surf line. The size and force of these waves can hold a swimmer underwater for several fearful seconds, and in shallow water can hit a wader with enough force to break bones. **Heavy surf is often accompanied by strong lateral currents, powerful shore break, and intense rip currents, which can compound the problem.**

## E. LATERAL CURRENTS

A lateral current, also known as a long shore current, usually runs parallel to the beach in the direction of the swell. If the current is strong enough, swimmers and waders will be carried along the shore, unable to maintain their position relative to shore. These swimmers may be swept into rip currents or inshore holes causing them difficulty resulting in needing to be rescued.

## F. SANDBARS

Sandbars and troughs are caused by a persistent lateral current which cuts a channel into the ocean floor. The shapes and sizes of these channels vary, but they are sometimes as much as eight or ten feet deep and run hundreds of feet parallel to shore before turning seaward. A single sandbar may exhibit several breaks, and rips may form at each break. Seeing bathers standing in shallow water far from the shore will often attract poor swimmers who will wade out, not realizing that deep water lies between them and their destination. They may quickly find themselves beyond their capabilities and require immediate assistance.




## G. INSHORE HOLES

Inshore holes are depressions up to several yards in diameter, dug into the sand by wave action at any depth, but often near shore. Small children can easily step from ankle deep water into depths over their heads. Inshore holes also pose a hazard to the lifeguard, as it is easy to be injured when running for a rescue and stepping in a hole unexpectedly. For this reason, it is essential that the lifeguard be familiar with the conditions of the area in which they are working. As with sandbars, the lifeguard must be aware that inshore holes will vary due to wind, waves, currents, & tidal changes.

## H. OBJECTS IN THE WATER

In addition to the changing dynamic conditions of the ocean, fixed and floating objects in the water can also provide an extreme hazard to lifeguards and patrons. Any object such as a box, pallet, tree or log, which drifts into the surf line, can be potentially dangerous if propelled by waves or currents. Objects that are fixed to the sandy bottom such as cables, rocks, or pilings need to be identified and monitored to prevent injuries to swimmers and waders.

# III. SPINAL INJURY PREVENTION

Most beach-related neck and spinal cord injuries are caused by the tremendous strength of the ocean's waves forcing a person's neck and spine into harmful, unnatural positions.

These injuries occur in a variety of ways. When your body tumbles in the waves, gets thrown by the waves to the ocean floor or when your head spears into the sand; your head can be forced down onto your shoulders, pushed forward into your chest or pushed backward further than it can naturally extend. And once spinal cord damage is sustained, little can be done to medically repair it. The result is severe pain, paralysis, the inability to breathe on your own or even death.

Dangerous activities that may result in neck and spinal cord injury include, but are not limited to:

- **Diving headfirst into waves or the water**
- **Jumping off of piers, rocks, jetties or surf boards**
- **Going over the falls, out of control**
- **Any activity that puts you at risk for trauma to the head or neck**

## Types of Neck and Spinal Cord Injuries

**Hyperextension**
The head is forced back further than it can extend, fracturing the bones in the back of the neck and tearing the supporting ligaments in the front. *Note: An uncontrolled wipeout can lead to this type of injury. Always try to fall "flat" and remember to keep your hands in front of your head at all times.

**Hyperflexion**
The head is pushed forward until the chin is forced against the chest, fracturing the bones at the front of the neck and stretching or tearing the supporting ligaments. These injuries can also damage the spinal cord. *Note: An uncontrolled wipeout can lead to this type of injury. Always try to fall "flat" and remember to keep your hands in front of your head at all times.

**Rotational Injury**
The head and body rotate in opposite directions severely twisting the ligaments, bones and spinal cord to the point where they may rupture, fracture or sever. *Note: An uncontrolled wipeout can lead to this type of injury. Always try to fall "flat" and remember to keep your hands in front of your head at all times.

**Vertical Compression**
The head is forced down onto the shoulders with great pressure, compressing the spinal cord and possibly fracturing bones in the neck. *Note: An uncontrolled wipeout can lead to this type of injury. Always try to fall "flat" and remember to keep your hands in front of your head at all times.

***IMPORTANT: Spinal cord injuries are no joke. Do not take chances with your neck/back!!!**

# IV. STANDARD RESCUE EQUIPMENT

Special knowledge and training in the use of rescue equipment are essential to professional lifeguard operations. These are primary factors separating professional lifeguards from amateur lifesavers. The rescue equipment described here is the mainstay of professional beach lifeguard agencies and is considered to be the core equipment that should be available to all beach lifeguards. Lifeguard agencies provide rescue equipment for several reasons:

- **Lifeguard Safety**: Drowning victims are desperate for buoyant support. A panicked victim is therefore a very real threat to an approaching lifeguard. The victim may attempt to grab the lifeguard, forcing both underwater and into a mutually life-threatening situation. Buoyant rescue tubes provided to victims usually have an immediate calming effect as the primary source of fear (submersion) is eliminated. This allows the lifeguard to safely complete the rescue.

- **Speed**: because the success of some rescues will depend greatly on how fast a lifeguard can reach a victim, equipment has been adapted or developed to decrease lifeguard response time.

- **Support of the Victim**: to reverse the drowning process, buoyant support must be provided for the victim. This support must be sufficient to maintain the victim's breathing passages above the water surface.

- **Increased Efficiency**: Many rescue devices provide increased efficiency for the lifeguard by augmenting the lifeguard's swimming skills or by providing support for the victim so that the lifeguard can devote more energy to swimming. For example, rescue flotation devices (RFDs) increase the speed with which victims can be removed from the water and allow the rescue of multiple victims by a single lifeguard.

## A. RESCUE FLOATATION DEVICES

The rescue floatation device (RFD) has become the principal piece of rescue equipment used by professional lifeguards in the United States. ***When lifeguards are on duty, they are <u>always</u> expected to take an RFD along.**

There are good reasons for such policies:

- **Constant Readiness**: if a lifeguard is away from the station for some reason, a fundamental piece of rescue equipment will always be at hand for a sudden response. Some agencies forbid the storage of RFDs at the station, preferring that lifeguards carry the RFD to and from the station each day in anticipation of an early or late rescue. **You should always have it with you.**

- **Identification to the Public**: RFDs are very distinctive and recognizable, even more so than uniforms. When help is needed, people will quickly see and identify the person carrying an RFD as a lifeguard. The RFD also helps to symbolize the authority of the lifeguard when approaching a beach patron. In a rescue situation, the RFD helps identify a lifeguard during water entry, which may help to clear the way on a crowded beach or avoid confrontations. When a lifeguard responds to a rescue with an RFD (even a shallow water assist), people will often focus their attention to the water area, which can be helpful in bringing family members to the scene to help with information or ensure better future supervision. In the water, a victim seeing a swimmer approach would have no way of knowing this person is a lifeguard without the presence of the RFD.

- **Identification to Fellow Lifeguards**: like other people at the beach, lifeguards are easily lost in the crowd, but the characteristic shape and color of the RFD can identify a patrolling lifeguard on a rescue. As a signaling device, the RFD helps lifeguards in the water identify lifeguards on the beach and the instructions they are giving. At some larger agencies, RFDs of different color can identify special lifeguards or lifeguard supervisors.

The different types of RFDs each have distinctive characteristics, and many lifeguard agencies prefer one type over another for various reasons.

## B. RESCUE TUBE (THE STATE LIFEGUARD'S RFD)

The rescue tube, also known as the Peterson tube after the lifeguard who designed it, is a specific type of RFD used by several Lifeguard agencies in the U.S. A rescue tube is a flexible foam buoy with an embedded strap and vinyl skin. The embedded strap is connected to the lanyard leading to the lifeguard. Attached to one end of the strap are one or more rings. On the other end of the strap, a snap hook is attached. When the tube is bent, the hook can be snapped to the ring, creating a closed loop. In a rescue situation, the tube can be wrapped around the victim and secured.

***This type of RFD is particularly useful when taking a victim through breaking surf, wherein the rescuer and victim might otherwise be separated.**

Advantages of the Rescue Tube:

- **Hydrodynamic**: the rescue tube creates very little drag against the lifeguard towing it and they feel soft and secure when a victim grabs hold.

- **Secures the Victim**: the victim is actually wrapped in the buoy making it difficult for the victim and the lifeguard to become separated. Most victims are exhausted and had trouble holding on to an RFD, so the tube works very well.

Limitations of the Rescue Tube:

- **Designed for Single Victim Use**: the rescue tube can be used for more than one victim, but is designed for a single victim.

- **Requires Physical Contact with Victim**: snapping a rescue tube around the victim requires physical contact with a possibly panicked victim.

- **Fending Off**: Rescue tubes cannot be effectively used to fend off a panicked victim like a hard rescue buoy.

***The snap/clip of a rescue tube can be dangerous as it can cause lacerations or other injury, so be careful.** Further, rescue tubes are particularly susceptible to environmental degradation & should be stored in an elongated position out of the sun.

## C. SWIM FINS

**At nearly all lifeguard agencies, swim fins are required as part of the lifeguard's basic rescue equipment. Use them!!!** The obvious advantage to use of swim fins is the added speed and power that they give to the responding lifeguard. In rocky areas, swim fins provide protection for the feet. They can also be useful during search and recovery procedures requiring diving. Most ocean lifeguards use either the Ducks feet or Viper brands of swim fins.

## D. RESCUE BOARD

**Rescue boards (known also as paddleboards and rescue surfboards) are a valuable piece of rescue equipment that evolved from the surfboard.** While surfboards and rescue boards have a common ancestor, today's lifeguard rescue boards should not be confused with surfboards. Although these devices may have a similar appearance, rescue boards are designed primarily for rescue, not surfing.

A rescue board is a buoyant, lightweight, "surfboard-like" craft approximately 10 feet to 12 feet long and shaped to move quickly through the water. Most commercially produced rescue boards are manufactured from a shaped, reinforced core of polyurethane foam, which is then covered with a skin of fiberglass, epoxy, or other compounds. To increase stability, a skeg (fin) is attached to the bottom of the board at the rear, acting somewhat like the keel of a ship.

Rescue boards may be equipped with rope or inlaid handles for use by lifeguards and victims, and with eyelets to allow for towing. The primary use of a rescue board is water rescue of swimmers.

They can also be used in boat rescue and, if necessary, as a backboard to remove an injured victim from the water, although the latter use should only be as a last resort.

**Advantages of the Rescue Board:**

- **Speed**: when used properly under the right conditions, rescue boards can allow lifeguards to cover considerable distances much faster than swimming with fins, making them useful in rescues involving long approaches.

- **Buoyancy**: Rescue boards are very buoyant and can support numerous victims. Increased buoyancy can also be useful during situations where resuscitation must be provided in deep water. In calm water, rescue boards can even be used to administer rescue breathing. When rescuing a single victim, the victim is almost completely removed from the water, significantly increasing the sense of security.

- **Lightweight**: unlike a boat, the low weight of the rescue board allows it to be carried, launched, and operated by one lifeguard and easily transported atop a lifeguard vehicle. On the other hand, a rescue board is heavy and unwieldy compared to a rescue tube and cannot be easily transported by a lifeguard on foot over a long distance.

- **Platform**: the deck of the rescue board provides an excellent platform from which the lifeguard can observe the swim area. This makes the rescue board a rudimentary patrol device and a useful tool in surface searches of swim areas.

- **Usefulness in Flat Water**: Rescue boards, while based on the design of surfboards, are ideal for the flat water environment. In flat water, rescue boards are almost always the fastest method of accessing victims other than power boats.

**Limitations of the Rescue Board:**

- **Surf Conflicts**: A rescue board is difficult, and at times, nearly impossible, to move through heavy surf. A swimming lifeguard can more easily penetrate heavy surf than a lifeguard on a rescue board. Trying to return to shore with an incapacitated victim is very difficult in sizable surf. Loss of the rescue board in the surf is a considerable risk. If the board is lost, the lifeguard may be left without equipment and lose contact with the victim, not to mention the possible hazard for other swimmers presented by an uncontrolled rescue board. For these reasons, **it is advisable to carefully consider use of a rescue board in large, breaking surf, and it is suggested that lifeguards always wear swim fins and take an RFD. This way, if the rescue board is lost, the lifeguard will retain the ability to effectively complete the rescue.**

- **Lack of Maneuverability**: Rescue boards operate best when paddled in a straight line with occasional small correction made in direction. A congested swimming area may present the lifeguard with too many obstacles to move around enroute to the victim. Similarly, congested swimming areas may provide the lifeguard with difficult obstacles during retrieval.

- **Skill Requirements**: the rescue board is like no other piece of equipment, and lifeguards must practice rescue board skills often to develop and maintain proficiency. Without proper skills and practice, the rescue board can be an awkward piece of equipment that can be dangerous to beach visitors.

# V. PREVENTATIVE LIFEGUARDING

**While rescue is one of the primary responsibilities of lifeguards, the most important responsibility must be prevention.** When most people think of the job of an ocean lifeguard, they picture a highly skilled athlete trained in rescue techniques, pulling people out of the water. While making rescues is a vital part of a lifeguard's job, it's not the only one. An accomplished lifeguard does not just sit back and wait for a rescue situation to develop. The true lifeguard is always looking for potentially hazardous situations, and finding ways to prevent them.

***It is not enough to watch a swimmer drift into a rip current, and then rescue them; the lifeguard should move the swimmer away from the rip area, ideally, before the swimmer ever enters the water. The concept behind prevention is simple; *it is better to avoid a hazardous situation than to deal with it after it develops.*** While it might seem impressive for a lifeguard to make twenty rescues during a shift, a better day would be fifty prevents and two rescues. Circumstances surrounding drowning indicate that most drownings are due to carelessness and ignorance, as such, they are largely preventable.

**Preventative actions that help avert a dangerous situation include:**

- **Moving people away from rip currents**
- **Informing patrons of potential hazards**
- **Discouraging patrons from swimming in an area deemed unsafe**
- **Waving off boats that are too close to shore**
- **Preventing "drunk" or "high" individuals from entering the water**

# VI. WATER SURVEILLANCE

***To be able to accomplish your goal of saving lives, you must first and foremost, watch the water. Any outside interference, circumstances, or situations that take your eyes off the water will endanger the lives of those**

**for whom you are directly responsible. The unexpected can happen at any time, and you cannot respond if you don't see it.**

Lifeguards, perhaps more than any other public safety providers must maintain the utmost level of attention and the keenest possible observation skills. A lifeguard may watch over the water for many days without a significant event, which is a recipe for boredom, but a mere moment of inattention may mean the difference between life and death for a swimmer in distress. **These distractions must be reduced to a minimum, as lives are at stake.**

## A. SCANNING

**The safety of beach patrons is dependant upon effective continuous scanning techniques by lifeguards.** Acquiring good scanning skills will allow the lifeguard to recognize potential rescues often on dry land, thus allowing the guard to make contact before the incident progresses into a rescue. Visual scanning requires the guard to sweep their area of responsibility continually, looking from side to side, checking each person or group of persons briefly to identify any signs of difficulty or distress. Watch close to shore as well as far off shore. Watch all classifications of swimmers, waders, surfers, body boarders, kayakers, and even boaters intensely to locate trouble.

Scanning is most effective from the top of the lifeguard's tower, as it allows for an unobstructed view of the lifeguard's assigned area. Standing on the ground will limit your view, especially in more crowded conditions and will make it more difficult to locate swimmers in the troughs of waves. Also, ground level lifeguards are closer to patrons and are thus more prone to distractions. **A distressed swimmer may become submerged in only a few seconds. Therefore it is of the utmost importance to remain in the lifeguard tower as much as possible.**

Lifeguards must use overlapping techniques when scanning to ensure that every patron of the area of responsibility is being guarded**. The lifeguard is responsible for the area from the tower to the lifeguards left, all the way to the tower to the lifeguards right, or as far as the lifeguard can see with binoculars.** Guards may often have to cross check with each other to make sure that all areas are covered completely. Fatigue is an important cause of deterioration of a lifeguards scanning and may be caused by factors such as boredom, dehydration, tiredness (caused by actual rescues), eyestrain and exposure to the sun or wind. Lifeguards need to come to work well rested and not suffering from the previous night's activities.

While on duty, lifeguards must ensure that they drink enough water, use adequate protection against the sun and wind, and receive sufficient breaks. Guards absolutely must wear good sunglasses; not only to protect their eyes but also to aid them in seeing the water and swimmers, particularly when the glare is a problem. Sunglasses will also reduce eye fatigue due to long periods of exposure to the sun. Good quality polarized

lenses will significantly reduce glare from the surface of the water and make scanning much easier.

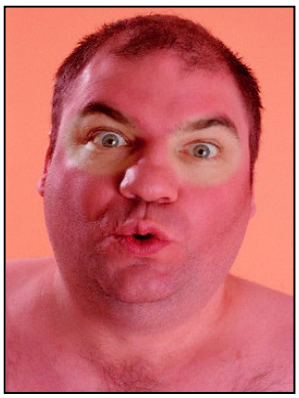
Quality binoculars are also important. They can be used to verify your initial instincts about a potential rescue, and can be used to key in on clues that require a closer look, such as hair in the eyes, or a scared look.

## B. PRE-WATER ASSESSMENT

In order to effectively prevent injuries and rescues, one of the skills a lifeguard must learn is how to recognize potential victims, often before the victim realizes that they are in danger. Experienced lifeguards can frequently predict which persons will need assistance long before an emergency arises, and sometimes even before they leave the parking lot. The following are some factors that may indicate a potential rescue victim:

- **Age**: very old or very young individuals should be watched carefully. They may lack the physical ability or strength to fight an unexpected current or to quickly move away from a dangerous situation. These individuals usually incur injuries near the shoreline, requiring quick recognition and an even faster response.

- **Weight**: persons who are extremely overweight or underweight may not be capable of struggling for longer periods of time as compared to individuals in good physical shape. Overweight persons may become easily exhausted, while underweight individuals are more susceptible to hypothermia.



- **Extremely white complexion or extremely sunburned**: these individuals are often making their first trip to the beach this season, or for that matter, their first trip ever. These persons should be watched carefully to ascertain their swimming ability once in the water. They should also be contacted about the hazards of the sun.

- **Intoxication**: Alcohol and water don't mix. Many drownings are associated with the consumption of alcohol. It may impair their normal physical abilities, or their ability to act responsibly.

- **Improper equipment and floatation devices**: some individuals who have limited swimming skills often rely on floatation devises to take them into deeper water than they would be capable of reaching on their own. If these people become separated from the devises, they may panic or drown.

- **Improper attire**: persons entering the water wearing clothes, other than those meant for swimming are also at risk. The weight and restrictive nature of wet clothing can cause a person to tire quickly. Similarly, not wearing a wetsuit in cold water can increase the chance of a cold related emergency.

- **Disabilities and ethnicity**: while persons with physical impairments generally know their limitations, the ocean environment adds factors that may cause them great difficulty. They should be watched carefully and warned of these types of hazards. There have been studies that identify significant differences in the drowning rates of various racial and ethnic groups. These statistical trends appear to be associated with socioeconomic factors rather than physicality. However varied, an extra eye may be deemed necessary on at-risk populations.

# VII. SIGNS OF A SWIMMER IN DISTRESS

A person, who is having difficulty and/or is struggling on the surface of the water will exhibit several types of behavior. A distress situation involves a swimmer who is unable to return to safety without assistance, but has enough of a swimming or floating ability to summon help by exhibiting signs of a struggle. There are a number of signs in the water that provide essential clues that a lifeguard must watch out for:

- **Facing towards shore**: swimmers generally face toward shore when they are concerned about how to get there. Body boarders and swimmers usually face waves to prevent from being pummeled, and to catch waves. The less experience individuals are looking towards shore as their haven of safety.

- **Head low in the water**: competent swimmers remaining in a stationary position usually hold their head high. A weaker swimmer will often have difficulty keeping their chin out of the water.

- **Low erratic stroke**: This usually accompanies the swimmers head being low in the water. The stroke may be erratic with the elbows dragging.

- **Lack of kick**: under normal circumstance a weaker swimmer displays no kick. Stronger swimmers will often propel themselves solely with their legs and wear fins.

- **Waves breaking over the head**: most people who are competent swimmers will dive under waves to prevent from being pummeled or knocked backwards. Poor swimmers with little or no ocean ability will let waves crash down on top of them, especially when they are panicking or having difficulty getting to shore.

- **Hair in eyes**: the natural instinct for most people in control of themselves in the water is to sweep the hair out of their eyes. This is the last thing on a distressed swimmer's mind, and something to take note of.

- **Scared or anxious look**: depending on the distance and quality of binoculars, the lifeguard can read fear, anxiety, and fatigue on a distressed swimmer's face.

- **Heads together**: swimmers who suddenly converge and remain together may be attempting to assist one another. Binoculars can be used to get a closer look to identify if one swimmer is assisting another.

- **Hands waving**: self-explanatory. A lifeguard must be careful to determine if it is a wave for assistance or just a friendly wave to a friend or family member on the beach.

- **Being swept along in a lateral current or rip current**: a sign of distress often involves a swimmer moving quickly with a lateral current, or moving backwards, out to sea in a rip current.

- **Erratic or unusual behavior**: watch for hyperactive motions such as flailing arms, or for total immobility in water.

- **Clinging to fixed objects**: individuals hanging on pier pilings, rocks, or other solid structures might be doing so in order to stay above water.

## DROWNING

**Preventing drowning is the ultimate goal of a lifeguard.** In drowning, a swimmer will often exhibit signs that are different from those of a distressed swimmer who may still have the ability to signal for help, or maintain lifesaving floatation. Classic, signs that a person has gone beyond being in distress, to the imminent danger of drowning are:

- **A vertical body position in the water:** The hands and legs hang directly downwards, and no effort is made to kick, or try and keep them above water. This action impedes the body's buoyancy.

- **Instinctive arm movements:** Victims attempt to lift their head upward in the water by thrashing with both arms, pressing down for support. This is commonly called "climbing the ladder" and is a sign of a desperate swimmer trying to stay above water. They cannot raise their hands to call for help. And they may appear

to be simply playing in the water. A closer look with binoculars will usually indicate the true nature of this emergency.

- **The head is extended back, attempting to keep the face above water in order to breathe:** The drowning person is rarely able to call for help, as breathing will take priority over any speech, even calling for help.

- **Double arm grasping with no floatation:** this resembles an ineffective butterfly stroke. The victim slaps the water with both arms simultaneously in an attempt to stay above the surface.

- **Climbing the ladder**: the act of a desperate swimmer trying to swim upward, as if they were attempting to climb a ladder. This is often a last ditch effort to get the swimmer's head above water, and therefore a clear indicator that assistance is needed immediately.

- After struggling on the surface for approximately 20-60 seconds, the victim will finally **submerge**.

***Remember…if you have any doubt about a person's ability to return to shore, swim out and escort them in.**

# VIII. COMPONENTS OF A RESCUE

**The basic mission of the lifeguard is to recognize trouble, get to the victim, get the victim to shore, and to then care for the victim onshore.**

## A. ENTERING THE WATER

Once a rescue or potential rescue has been identified and the need for back up has been addressed, the lifeguard must enter the water. While keeping an eye on the victim, take off any clothing other than a swimsuit (don't forget your sunglasses), carefully climb down the tower, and grab your rescue tube and fins. Next, run to the hard-packed sand directly in front of your tower. Once on the hard-pack, the lifeguard should run to the spot chosen to enter the water. Choosing the best location to enter the water is very important.

**In a surf rescue, the lifeguard will need to take several factors into account <u>before</u> entering the water in order to avoid a poor water entry, resulting in missing the victim.** If a lateral current exists, the lifeguard should estimate the speed of the current and enter the water accordingly. If there is a strong lateral current from north to south, then the lifeguard should enter well to the north of the victim assuming

the victim is stationary outside the current. This will allow the lifeguard to drift toward the victim during the approach.

During a rip current rescue, the lifeguard can often use the same rip current the victim is trapped in to reach the victim. Shallow areas and sandbars can also be used to run to the victim. **In general, since running is faster than swimming, the lifeguard should plan their entry to minimize the distance they will have to swim to reach the victim.** Once in the water, the lifeguard should "pop" the buoy and run with "high knees" until the water is waist deep. **Do not "pop" the rescue tube while on dry land as you could trip on the rope.** Once running is no longer efficient, the "dolphin" or "porpoise" technique should be used.

When "dolphining", the lifeguard springs forward into a shallow dive with the hands out in front of the head, then grabs hold of the sand and pulls forward to the feet, and then into another shallow dive. This technique is repeated until the water is about chest high, when swimming becomes more efficient. As you encounter incoming waves, it will be necessary to dive under as deep as possible until the energy of the waves has passed, then push off the bottom toward the surface. **This is the time to put on your fins**. As you "dolphin", dive into the water and quickly put on your fins.

You can put on one at a time, or both during the same dive, so long as it does not slow your response. As you dolphin be sure to keep an eye on your victim when you can, remembering to keep the victim's position in mind whenever the victim is out of sight.

**Always keep your hands in front of your head when "dolphining" to avoid serious injury!!!**

## B. APPROACHING THE VICTIM

**Swim as high in the water as you can, preferably with your head up and your eyes on the victim.** This will give you a better view, and will let the victim know that help is on the way. **Once you are approximately six feet away from the victim, slow your response and hand your rescue tube to the victim, keeping away from a position that will allow the victim to grab you.** If the victim does grab you, submerge yourself and push away from the victim with your feet. **Once you are clear, push the victim your tube, come up from behind and clip them in.**

When the victim has the rescue tube clipped in around their chest, calm them, assuring them that the situation is under control. At the same time you can give the victim an opportunity to rest for a few seconds before heading in to shore. This is also an opportunity for you to explain to the victim the procedure for bringing them in through

the surf line. Show the victim exactly how you would like them to hold the rescue tube, and what to do when confronted with a wave.

## C. RETURNING TO SHORE

Once you have secured your victim, you will need to decide the best path to return to shore. Use the conditions to your advantage whenever possible. For example, if there is a sandbar or shallow area nearby, swim the victim there and walk to shore. In a rip current rescue, it may be necessary for you to swim in the opposite direction of the lateral current if the rip is moving with the current. **If you find yourself in a rip current with your victim, do not attempt to swim against the rip current. Swim parallel to shore, or at an angle until you are out of the rip current and then proceed towards the shore.**

**Use the backstroke technique when swimming to shore. This will allow you to maintain constant visual contact with your victim, as well as allowing you to check for incoming waves.** Reassure the victim as you swim & remind them to stay calm and hold the tube. When returning the victim to shore in heavy surf, it may be necessary for you to wait through larger sets, returning the victim to shore during a lull. If necessary, you may also signal for assistance from lifeguards on the beach.

If you are returning the victim to shore and you encounter a large wave, get behind the victim and hug them tightly to your tube, telling them to take a deep breath. Just before the wave hits, roll the victim backwards slightly, under the incoming wave. **Do not let go of your victim!!!** If you lose your victim under a wave they could be badly shaken up, injured, or may stay submerged. In the event that this does happen, anticipate where the victim will surface and attempt to find them.

Once you do, re-secure them in your tube and continue towards shore. Keep swimming until the water is shallow enough that your hands are touching the ocean floor as you swim, then stand up. **Grab your victim under the arm and walk backwards toward the shore, with your victim facing you.** Take this opportunity to explain the victim why they needed your assistance, and how to avoid making the same mistakes later. Do not let go of the victim and do not remove your fins until you are in ankle deep water.

***The decision to release the victim from the tube should be made by the lifeguard, never the victim.**

## D. CARING FOR THE VICTIM ON SHORE

One of the most difficult decisions a lifeguard must make is how to treat a victim who is believed to have aspired (inhaled) water. This situation can lead to a fatal condition known as **"near drowning"** or **"parking lot drowning"**. At a minimum, a near-drowning case is a case in which the victim is coughing, indicating that water has been

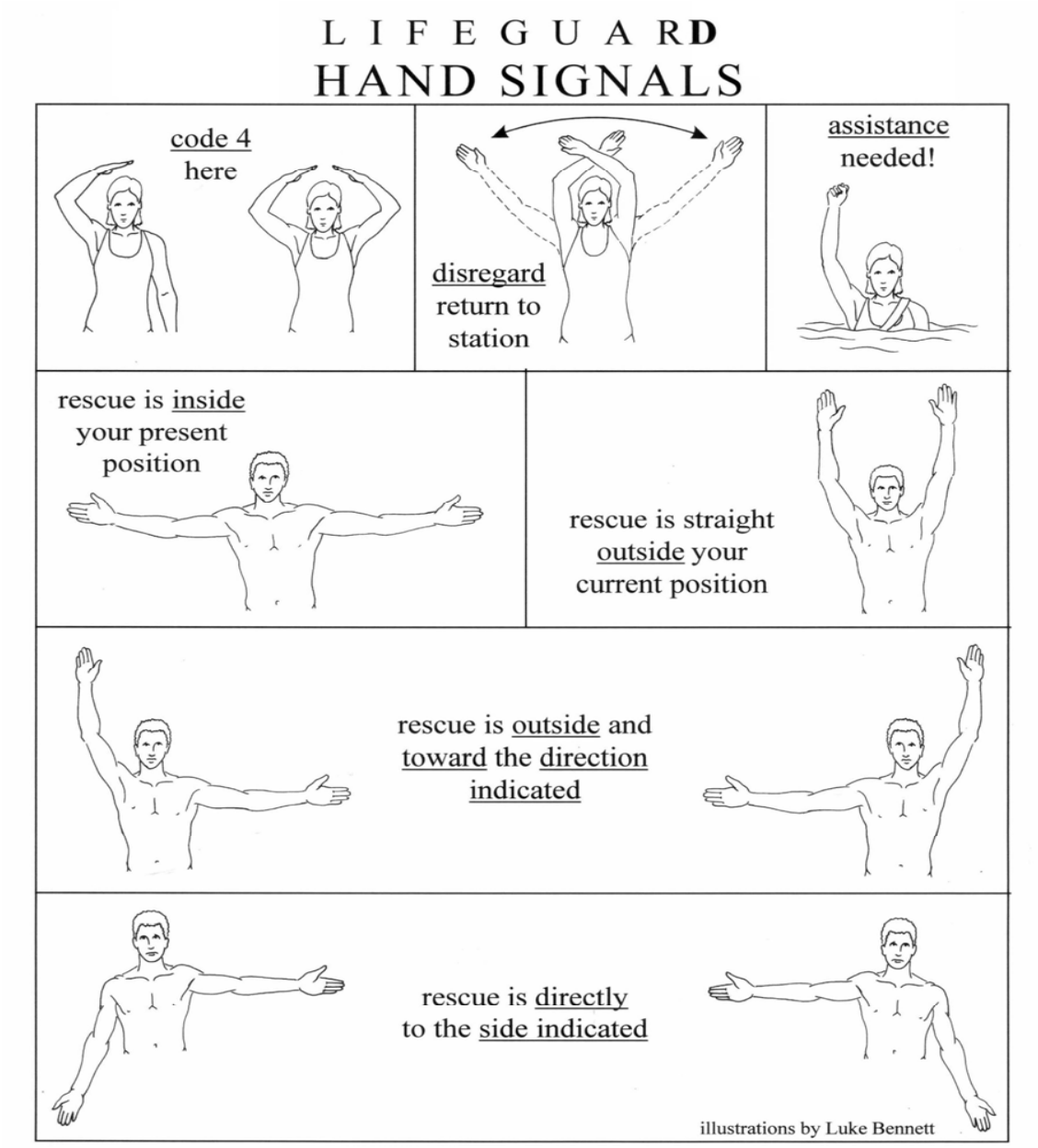
aspired. More serious findings, such as foam about the nose and mouth, or difficulty, or absence of breathing can also identify a near-drowning emergency. Cases without any of these symptoms can be classified as simple rescues, and the victims may be released at the scene.

Recommended care for near-drowning victims can be divided into six grades of severity and treatment:

| GRAZDE | SIGNS AND SYMPTOMS | FIRST AID |
|---|---|---|
| **Rescue** | **No coughing, foam, difficulty breathing, or cardiac arrest** | 1. Evaluate and release from the accident site without further medical care as appropriate |
| **1** | **Cough, without foam in mouth/nose** | 2. Rest, warm and calm the victim;<br>3. Advanced medical attention or oxygen administration should not normally be required |
| **2** | **Small amount of foam in mouth/nose** | 4. Oxygen, 2-4 liters/min (by nasal cannula);<br>5. Rest, warm and calm the victim;<br>6. Hospital observation from 6 to 24 hours. |
| **3** | **Large amount of foam in mouth /nose with palpable radial pulse** | 7. 15 liters/min of oxygen by facial mask;<br>8. Advanced cardiac life support (ACLS);<br>9. Hospitalization required. |
| **4** | **Large amount of foam in mouth/nose, without palpable radial pulse** | 10. 15 liters/min of oxygen by facial mask;<br>11. Monitor breathing;<br>12. Advanced cardiac life support (ACLS) immediately for mechanical ventilation and I.V. fluid infusion;<br>13. Hospitalization (ICU) required. |
| **5** | **Respiratory arrest, without cardiac arrest.** | 14. mouth-to-mouth immediately at the scene;<br>15. Hospitalization (ICU) required. |
| **6** | **Cardiopulmonary arrest** | 16. Apply CPR immediately;<br>17. Hospitalization (ICU) required. |

## E. HAND SIGNALS

Knowledge of hand signals are a must during rescue and/or recovery situations especially when the victim, rescuer, and /or rescue effort is a long distance from shore or in an area where noise, heavy surf, or other distractions make it difficult to communicate. The following are the most common hand signals used by lifeguards and should be memorized by all JG Assistants:



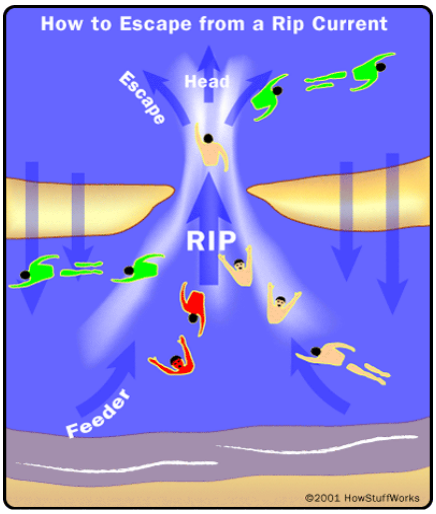

# IX. DIFFERENT TYPES OF RESCUES

## A. RIP CURRENT RESCUES

**80% of all ocean rescues are caused by rip currents.** The same currents can provide the lifeguard with an easy visual clue as to where rescues are likely to occur, a quick means of reaching the victim, and finally, some challenges for returning the victim to shore. Rip currents can easily extend several hundred yards offshore, and may be up to a half mile wide. As such, when rescuing a victim caught in a rip current, the lifeguard and victim may become quite tired. Upon reaching the victim, the lifeguard should gain

control of, and stabilize the victim, as well as take an opportunity to catch their breath if necessary.

***In returning the victim to shore, it is important not to swim directly back against the rip current.** The lifeguard has two good options in returning the victim to shore during a rip rescue:




- **The lifeguard can swim the victim at a forty-five degree angle back towards shore, and out of the rip current.**

- **If the lifeguard is unable to make progress swimming diagonally, they may want to swim parallel to shore until they are completely clear of the rip current before attempting to return the victim to shore.**

## B. RESCUES REQUIRING BACK-UP

**Common sense and experience are the most important tools when backing-up other lifeguards.** While every case is different, there are some general rules on backing-up other lifeguards:

- Go to the assistance of another lifeguard when there are more victims in the water than lifeguards.

- If the lifeguard next to you goes out on a rescue, help to cover the lifeguard's water by scanning the area with your binoculars until the lifeguard returns or more sufficient back up arrives.

- If you see the condition of the rescue worsens, contact your Supervisor as to the situation and provide the proper response using good judgment and common sense.

## C. MULTIPLE VICTIM RESCUES

It is not uncommon for a rescue to involve more than one victim. **There are two keys to successful rescue of multiple victims: 1) floatation and 2) back up**. Your rescue tube, if properly used, can float several victims. The weakest swimmer or the one in the most distress should be clipped into the tube. Additional victims can hold on the tube as room allows.

**Keeping your victims calm in this situation is essential to maintaining floatation on multiple victims.** The more they panic, the more difficult it will be to hold on. If you have access to a paddleboard in a multiple victim rescue, then use it. It will provide more area for victims to hold on to. Back up is also critical on mass rescues.

Providing a brief description of the rescue over the radio will let the lifeguards around you know the severity of the situation, and their response will let you know that additional help is on the way. As you enter the water on a multiple victim rescue, you can warn potential victims out of the area. This serves to eliminate additional rescues and allows the lifeguard to sort out which victims are in most distress. Generally a lifeguard should never swim past a victim to reach another. **If the lifeguard is approaching a victim and sees another further out, secure the first victim to the tube, and tow the first victim to the second.**

## D. SURFER AND BODYBOARDER RESCUES

**Do not assume a surfer or body boarder will not need to be rescued just because they have a floatation device.** Many drownings occur every year due to body boarders who panic and drown when they leave their board behind to swim to shore. When making a rescue on a body boarder or surfer, instruct them to stay on the floatation device as you approach. A victim who is panicking will often leave their floatation when they see that the lifeguard is approaching. Once you reach the victim, have them remove any leashes or tethers that attach the board to the victim and proceed with the usual rescue technique.

**In certain cases the lifeguard can quickly return the victim to shore by using the body board or surfboard.** But extreme caution must be used to avoid possible injury to the lifeguard and the victim. Signs that may indicate a surfer or body boarder is in trouble include:

- **Continually falling off the board or leaving the board behind and trying to swim**
- **Weak paddling or kicking**
- **Paddling or kicking against a rip current**
- **Two people clinging to a body board or surfboard**
- **Attempting to paddle to shore with no progress.**

***Remember…anytime a swimmer, body boarder, or surfer is attempting to get in and is not making progress, assume that he/she is in need of the lifeguard's assistance.**

## E. RESCUES WITH SUSPECTED SPINAL INJURIES

Spinal injury is a critical concern for lifeguards as people often dive into the water, striking the bottom headfirst. **Any unconscious swimmer found floating in the water, must be treated with spinal injury precautions. The lifeguard must assume that the victim could have a spinal cord injury and take the necessary precautions.** Spinal injuries can occur in a variety of ways. When a swimmer gets thrown by waves to the ocean floor, or dives head first into a shallow area, their head can be forced into their shoulders, rotated around, or forced backwards causing severe trauma to their spine. This can cause vertebrae and disks between the vertebral bones to become dislocated or even shatter; which can put significant pressure on the spinal cord, or even slice it in two. Once this type of spinal damage has occurred, there is little that can be done medically to repair it. The result is severe pain, paralysis, inability to breathe without a ventilator, or even death.

The objectives of the lifeguard responding to a victim with a suspected spinal injury are to:

- **Minimize the movement of the victim's head, neck, and back to prevent further injury to the spinal column.**
- **Establish and maintain an open airway.**
- **Ensure that the victim is extricated from the water safely for further medical treatment.**

***Remember… your actions when dealing with a victim of a spinal cord injury can further injure, paralyze, or even kill the victim. Use extreme caution, and take any measure necessary to protect the victim's spine.**

**Upon reaching the victim, immediately support the victim's head and neck.** Check the victim's airway, and signal to shore for help. If the victim is floating face down, slide your arms under the victim's armpits, wrap your arms back up towards the head, and place your hands on both sides of the victim's head.

Supporting the victim with your forearms, gentry roll the victim over to a face up position while maintaining head and body alignment. Keep the victim's head above water to allow them to breathe, and wait for assistance (this will be difficult to say the least, so the more people that can assist you in this, the better).

An ideal response is a team of lifeguard personnel with spinal immobilizing equipment. But in the event that you are alone or in the surf line, you may need to call upon the assistance of beach patrons to help. **It is very important that you take your time.**

**If the victim's airway is intact, your only job is to prevent further injury to the victim's spine**. Although you do not need to rush a spinal injury situation, you do want to move the victim out of the water as soon and as safely as possible, as further injury is likely to incur due to the chaos of the surf line.

## F. SUBMERSIONS

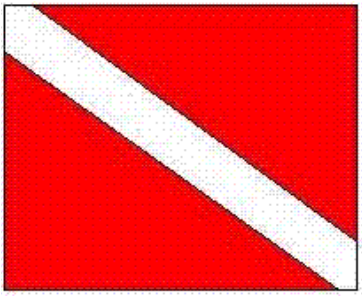
A submerged victim is one who has disappeared beneath the surface of the water. **All reports of submersions or drownings <u>must</u> be investigated.** However, just because someone states that the last place a missing person was seen was in the water, is not enough of a reason to begin a search and recovery effort that may incite a chaotic scene. This, as reports of missing people having drowned or that were last seen in the water, are frequent.

***In the event of a reported submersion, contact a lifeguard or JG Instructor IMMEDIATELY for assistance and wait for direction.** If there is a credible report of a submersion, such as an eye witness, or if *you* witness it and no other lifeguards are around:

- **Ask the reporting party "Did you actually see the person submerge?"**
- **Request emergency back up**
- **Proceed to the victim's last known location, fixing the position of the victim using landmarks such as piers, buildings, towers, or the opposite shore, so that you can relocate the point of submersion**
- **Drop a "last seen point" (LSP) buoy in the water**
- **Tell the person reporting the submersion to stay in a specified area**
- **Repeatedly free-dive at the location until help arrives**

With the arrival of other lifeguards, dive equipment should become available. Search patterns can be organized based on prevailing currents or surf conditions. In shallow waters, lifeguards can from a "human chain", sweeping down current from the point where the victim disappeared. If the victim is located underwater, the lifeguard should bring the victim to the surface in any way possible and establish an airway, providing rescue breaths as necessary until help arrives.

## G. SCUBA & SKIN DIVING RESCUES



In the event of a diver rescue, **three factors often contribute to a dive emergency: 1) too much weight on the diver's belt, 2) a lack of physical conditioning, and 3) inexperience.** An observant lifeguard can prevent many dive rescues by simply identifying an inexperienced or untrained fiver before they enter the water by alerting them to the hazards that may be present. The lifeguard should contact the divers in their assigned area prior to them entering the water, and find out such information as skill level, length of the intended dive, and location of the dive. This is also an opportunity to warn divers of any unusual rough or hazardous conditions.

A few signs of a diver in distress on the surface include:

- A diver surfacing alone, and several minutes passing without seeing a dive "buddy"
- A diver surfacing, and not moving
- A diver breaking the surface quickly
- A diver struggling in the surf line
- A diver removing their facemask or other equipment in a hurried manner
- A diver repeatedly sounding a whistle (the international sign of a diver in distress)

***To rescue a diver on the surface, the lifeguard should swim to the victim and immediately release the victim's weight belt. Inflate the victim's buoyancy compensator device (BC), and keep the victim's face out of the water.** Check for breathing and administer rescue breathing as necessary. To rescue a diver on the bottom, the lifeguard should swim to the victim and release the weight belt. Then swim to the surface with the victim, then inflate the victim's BC, and check for breathing.

## H. BOAT RESCUES

Boats can present lifeguards with a variety of rescue situations. Be aware that a novice boater may be in distress and not even realize it. For this reason you must be alert to boats in your area, even when there appears to be no attempt by the skipper to signal for help. Boat rescues happen very quickly and a boat can end up on shore in seconds. **If a boat appears to be in distress, go check it out! Do not wait for it to be in the surf line before you do something.**

Signs of a boat in distress include:

- People' trying to start the engine as the boat drifts toward the surf line
- Persons rowing a powerboat
- A capsized boat
- Persons waving their arms, clothing, or flags
- A boat anchored for a long period of time while persons aboard work on the engine
- Engine hatches up
- A boat with nobody aboard
- A gun or flares fired
- A continuous sounding of a whistle, horn, or fog signals
- Displaying an orange flag, black center

**If you see a vessel in or near the surf line, call for back-up immediately. Any boat in the surf line needs help immediately!** If the boat is coming in through the surf line, call for back up, and then run to the area of the boat. Clear the boat's path of swimmers and waders making sure to stay clear of the boat. **Never get between the boat and the shore as it comes in.**

If you are approaching the boat from the water, always keep to one side to avoid being hit if a wave pushes the boat towards shore. Do not try to board the boat. Instruct the people on board to put on life jackets and exit the vessel to the seaward side of the boat. Instruct the operator not to try to start the engine, and to drop the anchor if there is time. Approach the victims in the water, and stabilize them using your rescue tube until help arrives. ASAP ascertain from victims if anyone is trapped inside the vessel. **If the vessel is on fire, stay away from it! A boat on fire is a bomb waiting to explode!**

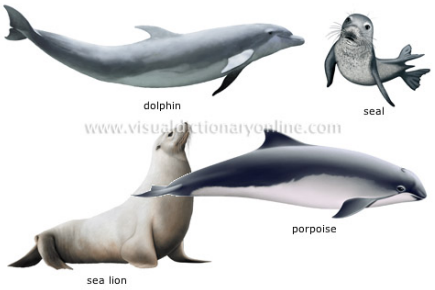
# X. HAZARDOUS MARINE LIFE

## A. SHARKS

Sharks are found anywhere, including in the surf line. While shark attacks are rare, the possibility does exist. Most pacific species are harmless in the sense that attacks are uncommon. When swimming near the surface, sharks usually have two fins showing. The dorsal fin will be fixed, while the tail fin is sweeping back and forth. The shape of the sharks fin is triangular and will be visible on the surface of the water much longer than those of dolphins.

While the public's perception of sharks is that of a cold-blooded killer, searching for swimmers as a meal, they rarely attack. **If a shark is spotted in your area and you feel obligated to inform the public, do so in a manner that will educate your patrons rather than incite panic. *As a general rule, err on the side of safety, but contact your supervisor or dispatch prior to taking action.**

## B. MARINE MAMMALS




Marine mammals such as whales, dolphins, porpoises, seals, and sea lions are regularly observed in the waters off the coast of California's beaches. Often mistaken by the public as sharks, dolphins & porpoises can be differentiated by their exhalation of vapors through their blowhole, their rhythmic up and

down swimming style, and their curved dorsal fin. Dolphins & porpoises usually travel in pods or groups of dolphins and are harmless. Whales are also spotted off of the Pacific coast from time to time (primarily in the spring months) and can cross paths with boats, kayakers, surfers and/or swimmers. Seals and Sea Lions also frequent the California coast. While all of these creatures are commonly considered to be docile and harmless creatures, there have been reported incidents that warrant concern. It is important to understand that these creatures; while beautiful and seemingly safe are wild and unpredictable.

## C. SKATES & RAYS

Skates and rays are prominent in most oceans around the world, including the Pacific. Many are harmless, but those such as the stingray can inflict a sting that can be quite painful if stepped on. While a stingray wound on the foot or ankle of an unsuspecting wader seems like a minor injury due to its small size, it can be an extremely painful experience for the victim (stingray barb; right). Additionally, many people are allergic to the toxin in the stingray's venom, and can have severe reaction requiring hospitalization. **The treatment for a stingray wound is to control bleeding, and to immerse the victim's foot in hot water for one to several hours.**

## D. JELLYFISH

Jellyfish are plentiful off the Pacific coast. While not an everyday occurrence, jellyfish stings are common. Most victims of jellyfish stings do not suffer the same intense pain as stingray victims, but may be stung several times as they often appear in groups of hundreds. The prominent species of the area is approximately six inches in diameter and is usually whitish or clear in color, with red streaks in its umbrella and tentacles. Cells on the tentacles called nematocysts cause the sting by injecting a toxin into the skin.

Reaction to the sting can range from mild prickling sensation, to a violent burning or throbbing pain. The injured area usually turns red, and a rash and, or swelling may develop. A person who is sensitive to jellyfish toxin can suffer anaphylactic shock, resulting in swelling of the respiratory tract, potentially leading to death. The Portuguese man-o-war, a cousin of the jellyfish, can produce a much more painful sting. These encounters are far less common, but do occur occasionally and can be quite severe. **Treatment for a jellyfish sting includes a 1:1 mixture of vinegar to water applied directly to the area stung. Stinging should subside within 20-40 minutes.**

# XI. ASSISTING LIFEGUARDS DURING EMERGENCIES

A situation could arise in which you may be asked to assist a professional ocean lifeguard (s) during an actual emergency. Such situations are rare but can and do occur. In the event of such an emergency, you, the trained JG Assistant, should have a basic understanding of emergency rescue procedures so as to help, and not hinder the rescue and response effort. **The 3 types of major incidents that are most likely to occur at JGs are (1) an aquatic rescue and/or a report of submersion/drowning, (2) a medical emergency, and (3) a lost person or lost JG.** The following is basic information on how to respond to such incidents.

## A. AQUATIC RESCUES

In all rescue incidents, **common sense is your most valuable asset.** However, in the event that you observe an aquatic rescue-otherwise known as a swimmer in distress- the first and most important thing you can do, if possible, is to **call for help.** Try to find a lifeguard or other emergency personnel and tell them what you saw. If you cannot locate one of these individuals, notify another Assistant, parent, or beachgoer, and tell them to call for help.

Next, determine if the situation is dire. If so, you will need to decide (10 if it will be necessary to rescue the victim and (2) are you, the Jg Assistant, capable of making the rescue safely? If the answer to both questions is "yes", look for a rescue tube and fins, or other floatation device (i.e. a boogie board or surfboard) and perform the rescue. **If you are unsure of your ability to safely rescue the victim without harming yourself or others, DO NOT ATTEMPT TO RESCUE THEM. Call 911 and wait for the assistance of a professional.**

Remember: In these and all other rescue situations, when in doubt, play it safe.

## B. DROWNINGS/ A REPORT OF SUBMERSION

**If you receive a report of someone who has submerged or drowned and are unsure about what to do, call 911 or contact a lifeguard immediately!**

After you have called for help, utilize the "Report of Submersion/Drowning Checklist" (provided here) as a guide:

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### REPORT OF SUBMERSION CHECKLIST

***Ask the reporting party the following questions immediately:**

1) Did you actually see the person go under water? ☐ Yes ☐ No
2) If not, who did and where are they?

_____

3) Where exactly did the incident occur?

_____

4) Are you sure the victim was last seen in the water? ☐ Yes ☐ No

5) How long ago/when exactly did you last see the victim?

_____

6) Is there any chance that the victim could have gone home? Left the beach with someone else? Etc? Yes ☐ No ☐

Additional comments:

_____

***Notify dispatch and the patrol guard immediately with the following information & request back-up:**

1) # of victims: _____
2) Area /spot last seen:

_____

3) Description of the victim/victims:

Victim 1: Age:_____Height:_____Weight:_____Clothing:_____

Victim 2: Age:_____Height:_____Weight:_____Clothing:

4) Location of the reporting party:

_____

5) What you plan to do next (begin a hasty search of the area, etc.):

_____

***Then do the following:**

☐ - Have the reporting party stand by at the tower or location of the incident.

☐ -Drop a "last seen buoy" for point of reference.

☐ -Begin a hasty search of the area using a mask& snorkel/goggles (don't forget to tell dispatch what you are doing).

☐ -As additional rescuers arrive on scene, report the facts as given &follow the orders of lead persons.

☐ -Perform an organized/systematic search as directed by the JG Coordinator, LG2, Permanent Lifeguard, or Lifeguard Supervisor.

***Pass this info sheet to the Incident Commander, LG 2, Perm LG, LG supervisor, or other lead person as soon as possible.**

## C. SEARCH METHODS

In a possible drowning/submersion situation, JG Assistants can/may be utilized to assist in the search for the victim(s). Assistants should be ready to hit the water (with buoy, fins, wetsuit, mask &snorkel, etc.) and pay strict attention to the lifeguard leading the search and recovery effort. **Don't be afraid to ask questions if you are unsure about any aspect of the search procedure.**

If you are selected to assist in the search, there are 3 primary search patterns that you should know. They are (1) the **circular search pattern,** (2) the **grid or line search pattern,** (3) **the surface search**.

- **Circular search:** a buoy is placed at the point last seen, and searchers spread out-either holding a line or without a line-and swim in a circular pattern. Once a full circle has been turned, the searchers spread out farther/wider and start another circle. The search should start close to the point last seen and spread out/away.
- **Grid search or line search:** searchers will form a line near the last seen point and will systematically eade or "shallow dive" in a grid pattern or line, searching with their eyes, hands, arms, legs, and feet as they go.
- **Surface search:** searchers are deployed on paddleboards, PWCs, boats, etc, and perform systematic searches similar to the 2 previously described methods. Typically, a surface search is used in deeper water while the circular and grid/line searches are used in shallower water.

## D. MEDICAL EMERGENCIES

**If a major medical emergency occurs on the beach or at JGs, Assistants should only assist as directed by the lifeguard in charge of the incident.**

It is extremely important that all personnel, including Assistants, make sure that the scene is safe, make absolutely certain to put on appropriate personal protective equipment (PPEs), and never exceed their trained level of care. Those without proper training should only be involved in a medical incident in a support capacity and never as the primary responder when trained personnel are available. No exceptions!

## E. LOST PERSON/ LOST JG

In the event of a lost/missing JG, it is imperative to notify a lifeguard or JG Instructor immediately. If a lifeguard is not immediately available, the Assistant should do the following:

1) Ask the reporting party (RP) where the child was last seen…
2) How long ago they were last seen…
3) Get a physical description (height, weight, hair color, eye color, clothing, etc.)…
4) Tell the reporting party to report back if they find the child…
5) Contact the lifeguard or call 911!