



Safety Bulletin

The Safety Committee of the United States Rowing Association was formed in 1987 to serve as an advisory group to the organization in the area of safety. Current projects of the committee include the production of a safety video and a regular column in USRowing magazine. This insert is being published as a service of the committee and USRowing. It is not meant as an all-inclusive treatment of rowing safety, as all possible situations and types of rowing could not be covered in such a brief forum. These guidelines are meant to serve as an outline for your own safety program. The safety committee welcomes your questions and comments.

Before the Row

1. All rowers must be able to pass a swim test, preferably including putting on a life jacket while in the water.
2. Know that your shell and your individual oar have been designed for floatation. They are not personal floatation devices (PFDs). They are only emergency floatation devices. The safety committee recommends that all unaccompanied boats carry Coast Guard approved PFDs. A copy of the Coast Guard Regulations concerning PFDs in rowing shells is available upon request from USRowing.
3. Before ever getting into a shell on the water, a rower must understand the following terminology: bow, stern, port, starboard, Weigh enough, Ready to Row?, back, tie-in, untie, stop, the stoke, bow person, seat numbers in between and which seat he/she is in that day. The term "stop" should be used only when talking to a specific crew in a race. When a coxswain or coach wants a crew to stop immediately, the proper term is "Weigh enough! Hold water!"
4. Each club should post a map of local waterways that included traffic pattern and any known hazards.
5. Every club should use a logbook. Everyone on the water should sign in and out. A sample logbook is available from USRowing. If you are rowing without the benefit of a monitored logbook let someone know where you are towing and what time you should be expected in.
6. Each person is 100% responsible for the whole boat and 100% accountable for how own oar, rigging foot stretchers, seat and slides. Check to make sure that all equipment is functioning properly before leaving the dock. If you aren't sure, ASK! Check the following:
 - A. That nuts on the rigging, position of your foot stretchers and the smoothness of your slide are acceptable.
 - B. That the forward end of the slide is blunt and will not gouge your calves
 - C. That the persons in front and behind you have sufficient room for their complete stoke

- D. That you are wearing socks, if you shell has the newer clogs to guard against blisters or thin-soled shoes if the clogs are too big for your feet.
 - E. That your seat fits your body. Adjust with seat pads or a different seat.
 - F. That your oar is the proper size
 - G. That your rigging is not too high
 - H. That your clothing cannot become tangled in your seat or oar handle
 - I. That you have proper safety devices on board, if warranted in your rowing equipment.
7. Make sure that you are aware of local traffic patterns and rules on the water.
- A. Right-of way rules have been developed by the U.S. Coast Guard. Vessels with the least maneuverability have the right-of-way, but always play it safe and take action to avoid all other types of boats. The maneuverability rule can be confusing. For example, a sailboat without wind has the right-of-way, but a sailboat with wind must give right-of-way to the shell.
 - B. Boats shove off and approach the dock for landing while moving upstream. Familiarize yourself with local traffic patterns.
 - C. Stay clear of bridge abutments and other man-made or natural obstacles. Do not negotiate a turn near such an obstacle.
 - D. Familiarize yourself with shallow water, stumps, rocks, seasonal problems and landmarks.
 - E. The coxswain or single sculler should make frequent checks on both sides. Listen for oncoming traffic.
 - F. Be courteous to others on that water. Be aware of powerboats and treat them with respect.
8. The safety or coaching launch provides safety supervision when rowing and support assistance in an emergency. A launch may prove useless unless the following precautions have been taken:
- A. The driver must be trained in the proper use and operation of the powerboat. Classes are offered through local chapters of the Red Cross, U.S. Power Squadron and state boating safety departments.
 - B. A radio or cell phone is recommended to allow a quick direct link with rescue services in the event of an emergency.
 - C. Emergency supplies in the launch should include a first aid kit, fire extinguisher, night lights and tool kit. The tool kit should contain wrenches, appropriate nuts, tape, washers and other materials needed to make small repairs. Only minor repairs should be done on the water.
 - D. Ensure that the launch carried a floatation device for all on board plus one for each person on the water.
 - E. Practice man overboard safety drills. Know how to have rowers enter the coaching launch from the water. Approach from the leeward side, keeping outboard propeller away from any victims. Turn off the engine as soon as contact is made. Avoid overloading.
9. Consult a physician before starting any form of exercise program.

10. Conditioning should be part of any rowing program. Most people do not have perfectly balanced bodies or sufficient stamina when they begin to row. Take it upon yourself to seek professional training advice.
11. Land warm-up should become part of your training ritual. Before rowing, get your body up to the proper intensity by taking three minutes before you touch the boat to get your body warmed up by jogging, jumping rope or running in place. Follow that workout with seven minutes of basic stretching.
12. Water warm-up should be used to gradually and safely build up to full intensity. An example would be building gradually from no pressure “hands only, bodies over, $\frac{1}{4}$ slide, $\frac{1}{2}$ slide, $\frac{3}{4}$ slide, full slide”, and then adding pressure until proper workout intensity is reached.

On the Water

1. Rowers in multi-person shells should always be quiet and attentive to the coxswain or coach.
2. Be aware of weather conditions. There are several inexpensive models of weather radios on the market. Use a weather radio or listen to local radio weather reports before going out on the water. Watch for gathering clouds, changes in wind speed and direction, temperature changes and other boats returning home. If on a river or tidal body of water, check the current direction and look for floating objects or kelp.
 - A. Do not row in high wind whitecaps or winds of 12 knots under any circumstances.
 - B. If sudden winds come up, return to the boathouse if the trip is safe, or take the boat to the nearest shore and wait for the winds to calm.
 - C. Try to minimize equipment damage, but remember that you are more valuable than your boat.
 - D. Do not row in fog unless your visibility to shore is at least 100 yards. Be sure to have land reference points. If fog sets in while you are on the water, move slowly, and be prepared to stop quickly. Use a sound-making device (Cox box, horn or whistle) to advise other boats of your location as you take your boat to shore, following the shore back to the boathouse.
 - E. Do not row in an electrical storm. If you are on the water and see lightning, hear thunder or notice your hair standing on end with static electricity, head for the nearest shore. If the storm is not yet upon you, follow close to the shoreline and quickly return to the boathouse. If the storm is upon you, take your boat ashore and wait for the storm to pass.
3. Waves are generated by winds, tides, currents or wakes from passing boats. Because shells are vulnerable to high waves, specific care is needed with approaching wakes.
 - a. If approaching wakes are higher than the gunwale, the shell should be turned parallel to the wake to avoid having parts of the shell unsupported by the water. It is possible to split a shell under these conditions. Rowers should stop rowing and lean away from the approaching wake, with oar on the wake side lifted slightly.

- b. If wakes lower than the gunwale and widely spaced, continue to row without a course adjustment. Deep and closely spaced wakes that are lower than the gunwale may be taken at a 90 degrees angle with the bow directly toward them.
- c. Turning in waves is tricky; allow plenty of room, energy and time.
- 4. Lightning conditions – The greatest danger while rowing is collision caused by limited vision or carelessness. Great care should be taken when rowing in darkness or near-darkness. Take extra care to look and listen. Minimize conversation. Be careful not to get too close to shore or known hazards. Only row in familiar waters under these conditions.
 - A. There should be an all round white light available for each rowing shell when rowing between sundown and sunup. It should be sufficient to warn approaching vessels. It is recommended that reflective tape be placed on the top of gunwales and splashboards. Refer to local laws for lighting.
 - B. Carry a sound-making device.
- 5. Water temperature should always be monitored.

Hyperthermia occurs when there is an increase in body temperature, usually when the air temperature is above 76 degrees, and the victim is exposed to sun and heat in combination with a decrease in fluids. It may occur when a) sweat cannot easily evaporate; b) the body is being heated by the environment; c) water loss from sweat and respiration is not replaced and dehydration occurs. Two serious conditions may result:

Heat Exhaustion – throbbing headache, nausea, cool skin, chills sweaty, pale pulse.

Action – drink water, shade from sun treat for shock.

Heat Stroke is life threatening – behavior changes, unconsciousness, hot but not sweaty, flushed warm skin and rapid pulsating pulse. Action – douse with cool water, shade from sun, fan, ensure the airway is open, always get medical assistance as soon as possible.

To avoid these problems in hot and humid weather:

- A. Maintain a high fluid level. Drink water before leaving the dock and frequently while on the water. Take an individual plastic water bottle for easy access.
- B. Avoid sunburn by using sunscreen, with a sweatband or hat to keep lotion out of eyes.
- C. Wear lightweight clothing.
- D. Remain in the shade when off the water.
- E. Plan activity level consistent with the degree of heat and humidity.

Hypothermia occurs when a victim is subject to cold temperatures, cold water, ice or snow. There is a potential danger for hypothermia when the water temperature is below 80 degrees and very dangerous when the water temperature is below 50 degrees.

Symptoms include feeling cold, turn bluish and shiver first, followed by numbness, apathy, lethargy, disorientation and loss of mental capacity.

Action if cold and shivering:

- A. Get out of the water quickly, even on top of a capsized boat. Heat loss is 25 times greater when in the water.
- B. Huddle with others
- C. Drown-proofing (dead man's float) is not acceptable survival technique. Keep as much of the body out of the water as possible.
- D. Move to shelter quickly, remove wet clothing and re-warm body. In mild hypothermia conditions, re-warm in a shower, tub or with warm blankets.
- E. Do not give any liquids to drink, treat for shock.
- F. Continue to re-warm and always obtain medical assistance as soon as possible.

Action of cold and shivering has stopped:

- A. Treat as above but **DO NOT RE-WARM EXTREMITIES!** If victim is no longer shivering, the torso must be re-warmed to avoid circulating cold blood to the heart. This can kill. Wrap the victim in a blanket and apply heat to underarms and groin area; wrap again in a separate blanket. Wrap each arm and leg separately to prevent re-warming. Hot packs should not be placed directly on the victim. A thin layer should be used to protect the victim's skin from this heat source. If hot packs are not available, place the victim in a sleeping bag with a warm person.
- B. Administer artificial respiration and CPR if necessary. Always obtain medical assistance as soon as possible.

Cold Water Emersion – Be aware that in very cold water people have survived as long as one hour underwater. Recover a victim immediately and even though there may be no sign of life, administer CPR efforts until medical assistance is obtained.

Emergency Conditions

1. Under no circumstances should a rower in the water leave his/her floatation boat. Even if a swamped boat is within a swim-able distance from the shore, the rower should swim the boat to the shore. Do not leave your floatation even if you consider yourself a strong swimmer.
2. Someone should give the command "Weigh Enough! Hold Water!" Don't ask questions just respond immediately by stopping all forward body movement. Square the blades in the water to bring the boat to a halt.
3. Use these distress signals to communicate to other boats: wave the arms or a shirt above your head or raise one oar in the air.
4. Man Overboard – Immediate command "Weigh enough, hold water!" The stroke removes oar from the oarlock to throw to the person in the water. Person in the water should lie across the oar and remain close to the shell. The launch picks up the person and determines if the rower returns to the shell. Another rower may be required to enter the water to assist with first aid.
5. Rower Injured – Immediate command "Weigh enough!" Signal launch if first aid is needed
6. Shell damaged but afloat and not taking on water – Immediate command "Weight enough!" Make adjustments or signal launch for assistance.

7. Shell Swamped – Immediate command “Weigh enough!” A shell is swamped when the interior water reached the gunwales. If rowers stay in the boat, the floatation ends may cause the boat to break apart.
 - A. Coxswain directs rowers to untie, and by seat number rowers should carefully, but quickly, slip overboard.
 - B. If the boat is taking on excessive water, signal launch and unload rowers by pairs – starting in the middle of the boat – as soon as possible in order to avoid damage to the boat. Pairs should form “buddies” and keep watch of each other. The Cox should buddy with the stern pair.
 - C. If rescue is not imminent, take the following steps: 1) Remove oars and place them parallel to the shell. All persons should move to the two ends of the shell. It is dangerous to roll a shell when near riggers. 2) Then roll the boat to form a more stable floatation platform so rowers can either lay on top of the hull or buddies can hold onto each other across the hull, 3) Remember that body heat loss occurs 25 times faster in water. Do not attempt to roll the boat if rescue is on the way.
 - D. A launch can shuttle rowers to the nearest shore. Be careful not to overload launch.
 - E. When the boat has been brought to the shore, remove the oars. If the ends of the shell have filled with water, they must be drained before the boat can be removed from the water. Remove the shell carefully to avoid injury or damage. A boat full of water is very heavy, so try bailing first, then roll the boat slowly and remove it from the water.
8. Singles should be rowed with a buddy boat or launch. The rescue boat will stabilize the re-entry. Entering the shell directly from the water may cause splashboard damage. Swim the boat to shore, lying in the stern, using the shell as a paddleboard. In very cold weather you can abandon your shells and lie on the stern deck of your buddy’s boat to be taken to shore. The loss of muscle control can occur very quickly and dramatically in cold water. The stern deck rescue may be your only option.
9. Shell capsized – Immediate command “Untie!” This rarely happens except in small boats. Be sure that all rowers and Cox are accounted for. Stay with boat until assistance arrives.
10. Shell broken and sinking – Immediate command “Untie!” Get out of the boat and follow the same procedures as for a swamped shell. Do not leave floating boat. Hold onto your oar and use it as a floatation device if your boat sinks.
11. Another Boat in Distress – If a distress signal is seen and insufficient assistance is nearer that craft, maneuver that shell to the distressed boat. Attempt to summons other launched or stable boats with distress signal. Assist in any way that does not jeopardize the lived in your boat.
12. Shells should stay “within hail” distance of their safety launch. That launch has been outfitted to provide assistance to rowers and/or their shell in the event that it is needed. Most frequently, the toolbox and coach’s expertise is available for

small equipment adjustments or breakdowns, which allow the shell to continue rowing after a short stop. If more serious needs arise, the launch and expert are there for rapid transportation.

13. Paddle-down at the end of your workout. It is important to your health that you don't race up to the dock. Once the boat and oars are stored, it is important to take another seven minutes to go through your basic stretching exercises to heal any unnoticed sprains or strains that began during your row, thus eliminating soreness and unnecessary pain.

Summary

As a coach you expect 100% from your athletes. They in turn expect the same from you. They expect you to be the best coach possible. To be the best you have to have your priorities in order. Safety should be at the top of your list.

Pre-Practice Safety Checklist

Coach

- CPR course
 - Proper Clothing
 - First Aid course
 - Boating safety Class
 - Safe water conditions
 - Knowledge of waterway
 - Use a logbook to record direction and time of return
 - If possible, have marine band radio or cell phone to make direct contact with emergency services.
- Practice Plan
 - Swim Test
 - Megaphone
 - Weather Forecast
 - Observer in launch
 - Tools

Athletes

- Swim Test
 - Physical Examinations
 - Stretch before workout
- Safety Talks
 - Proper clothing
 - Water to drink

Launch

- Life jackets
 - Registration
 - USCG required equipment
 - Spare seat and parts for each make of shell
- First Aid kit
 - Safety light
 - Spare safety plugs

Shells

- Bow ball
- Water tight compartments sealed
- Megaphone or COX-Box for coxswains
- Rigged properly
- Equipment checked (rudder, fin, etc)
- Lights

Sensible Precautions

Regardless of your best preparations, accidents may occur. Be prepared to minimize the danger.

The following steps should be taken in anticipation of potential problems.

Cardio-pulmonary Resuscitation (CPR)

Your knowledge of CPR could make the difference between life and death. If you do not have a current CPR card, then you do not possess all the skills you need to be a safe rowing coach. Contact your local Red Cross for the next available CPR classes.

First-Aid

The best rowing areas are usually far away from houses, roads and telephones. If someone is injured in a rowing practice on one of these great isolated areas, who is going to help you? You that's who!

When someone is hurt, the speed and quality of first aid often mean the difference between inconvenience and disaster. Small cuts that develop into cases of blood poisoning and bee stings to allergic athletes are only two examples.

Do not fool yourself by thinking that injuries won't happen. That can and will. Be prepared and know how to treat them.

Swim Test

Know the swimming abilities of your athletes. Your concern is not whether your rowers can swim well, but whether they can survive in the water. Even good swimmers do not always survive the shock and panic of sudden immersion in cold water.

A proper swim test should involve not just swimming a prescribed distance, but also putting on and taking off a life jacket, treading water, using an oar for flotation, and if possible getting into safety launches. Athletes need to be reminded again and again to stay with capsized boats. Hypothermia causes bad judgement, so actions must be trained by response. Coaches should also go through this test.

Safety Equipment

Many coaches look at safety equipment as a luxury they may not be able to afford.

Safety equipment is as important as your racing equipment. You cannot afford to go without it.

Many crews row in the early mornings or late afternoons when it may be dark. Shells should have lights.