



## SAFETY HANDBOOK Fredericton Rowing Club

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Replaces and/or Amends	1. FRC Rowing Safety Policy (dated September 2018) 2. FRC Cold Weather Rowing Policy (dated August 2018)
Appendix(-ces) to this document	Appendix A: On-Water Emergency Actions Appendix B: Use of Personal Floatation Devices (PFDs), Whistles and Lights Appendix C: On-Water Restrictions – Cold Weather Rowing
Authority	Fredericton Rowing Club By-Law No.1 dated November 30 <sup>th</sup> , 2022)
Reference(s)	1. Rowing Canada Aviron Rowing Safety Modules (RCA website under resources) 2. Safety Manual - Two Rivers Rowing Club, Fredericton, NB 3. Safety Handbook - False Creek Rowing Club, Vancouver BC.

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### 1. Boathouse and Dock Rules

The following rules are for the Fredericton Rowing Club (FRC) storage and launch area:

#### Keep Premises Clean and Orderly

- FRC encourages pride in its facility by maintaining an orderly and tidy boathouse and grounds, through daily or weekly means, as deemed appropriate by the Equipment Manager. Work parties and/or regular maintenance tasks will be organized and participation by all athletes is expected.

#### Storage

- All shells and blades shall be stored neatly in the proper manner in the racks assigned to them by the Equipment Manager.
- Launches shall be stored neatly in their assigned locations so as to minimize damage and inconvenience.

#### Docks/Wet Launching

- Launching will typically have right of way over landing. Unless a boat is to go back out again and the crew is ready by the dock side, the boat should be removed from the water to meet its new crew.



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- Crews should be ready to row with all crew members present and oars and safety equipment on the launch/dock BEFORE bringing the shell down. All shells shall dock and launch as quickly as possible. All gear and equipment shall be removed from the docks following a workout.
- As the launch area is shared with boaters and coach boats, aim to keep the shells off the dock so boaters and coach boats can fit in. Do not create conflict.

#### Wet Launching Instructions

- Carry down oars and equipment and leave close to the launching area and away from the dock.
- It is recommended to launch near the launch ramp.
- Bring boat down and place in water being aware of the fin and water depth. While someone holds the boat, others can gather oars.

#### Appropriate Clothing for Wet Launching

- Though it is not required it is STRONGLY RECOMMENDED that rowers purchase some tall rubber boots that can easily be folded and stored behind riggers or under seat in the hull. Not only do tall rubber boots reduce time fumbling with drying feet off and/or putting on socks, they also help avoid cold related injuries and infections.
- In the summer the algae count has been known to increase in parts of our river: make yourself aware of the counts to protect yourself from related infections.
- In the spring and fall, prolonged exposure to cold water may cause damage to skin and nerves.

#### Security

- All athletes and coaches shall be responsible to ensure that boathouse security works. All athletes shall have access to the facility.
- The boathouse doors must be securely closed once all crews are off the water. Check first to see if other athletes are still out, then secure the boathouse if not in use. IF IN DOUBT, SECURE. ● While boats are on the water, a pair of stretchers should be left in front of the boathouse. This is to indicate that someone is out there, and to provide a place to put down your boat when you return from rowing.

## **2. Equipment Rules**

- Authorized Use: No coach or athlete shall use equipment without the proper authorization as determined by the coach, Equipment Manager or President.
- When rowing a shell, the shell must be signed out and in using the logbook. This includes private shells.

#### Handling the Shell

- The coxswain/bow person is in charge on land and water. Two types of commands will be given, A) Preparation B) Execution.
- Take your time when moving the shell. Coxswain/bow person/coach should point out any problems before and during the action (e.g. "watch the rigger" "keep it on shoulders").
- Boats should all be carried bow forward so that they are launched bow first and returned to the storage area bow first (unless stern-first storage instructions exist for certain shells).



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- With coxed boats, the coxswain/coach walks with the bow, looking forward and around for possible problems. The first two athletes are responsible for the front of the shell. All athletes should be alert to potential problems. The last athlete is responsible for the trailing end.
- Position stretchers properly to balance shell and avoid fin or splashguard damage.
- On the dock, keep your toes on the edge while lowering the shell or taking it out (with one hand in and one hand under). This prevents the shell from hitting the dock. Coxswain/coach/stern person stands at the fin pushing the shell away from the edge to avoid hitting the fin. Keep the shell away from the dock's edge at all times and lean away when shoving off or landing to keep riggers above the dock. When getting into or exiting the shell, do not let the riggers take the weight on the dock!
- Landing at the dock: All athletes should be alert and watching their dockside oar as the shell approaches the dock. Lean away when commanded and raise the oar to clear the dock. All landings should be at slow speed; courtesy and cooperation being the rule. Move the shell as far down the dock as possible to permit others to dock or launch.
- When wet launching the boat, walk down to the water, at the water's edge turn to be parallel, walk the boat in the water, raise the boat above heads then in one movement roll the boat to the water side then lower into the water. Avoid rolling the boat directly into the water as riggers need to clear prior to boat being lowered.
- When landing, place a hand on each gunnel while facing the stern, then in one fluid movement, raise the boat to the shoulder then up and over. Split and stern walk out of the water first.

#### Care and Maintenance of Equipment

- People shall report equipment damage promptly by completing a yellow damage tag and attaching it to the shell. Never row with broken equipment. Damage tags can be found near the logbook in the boathouse. Note: Athletes are responsible for assisting Equipment Manager with the repairs. All athletes are responsible for the care of the shells they row, including washing shells inside and out, and oars after each time the shell is taken out on the water.
- Boats must comply with the Rowing Canada Aviron Rules of Racing in terms of safety at all times: this includes ensuring that bow balls exceed the minimum size and are in good condition, heel ties have less than 7 cm of play and all shoes can be released with a single hand motion.
- Oars
  - a. Sweep: carry one in each hand, not in bundles, Scull: two in one hand if preferred
  - b. place on dock/launch, side by side, not piled
  - c. place on the ground, convex side up to protect paint
  - d. do not scrape oars across dock when launching/docking
  - e. Avoid getting any sand on the handles or collars to protect delicate surfaces.
- Cox Boxes.

Protect this expensive and necessary equipment at all times

  - a. coxswains and coaches only are authorized to handle Cox boxes
  - b. connections are sensitive so make sure you know what you are doing, never pull the wires
  - c. weekly: lightly clean and oil plugs and connections
  - d. do not leave lying around where clumsy feet can kick or step on.



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- Daily: check all nuts and bolts before and during each row. Never row with a loose foot stretcher or rigger. Each athlete shall keep their place in good condition, doing small repairs after talking with their coach. Major repairs shall be coordinated by the Equipment Manager. Coxswains and athletes should always have a basic rowing tool kit handy. (7/16 or adjustable wrench, multipurpose screwdriver, electrician's tape, pliers).
- All shells must be rinsed and wiped down after each row.
- Weekly: Cleaning and lubricating shall be done by athletes. Thoroughly wash assigned shells and oars. Check for damage or loose parts. Tidy up deck and sweep boathouse. Lubricate bearing based wheels.
- Labeling: All removable parts are to be labelled for their shell location. Pirating is forbidden except in emergencies, after prior permission from the Coach. Pirated parts **MUST** be returned to the original shell and the broken/lost part reported on the white board and via email.
- Parts Cabinet: The coaches and Equipment Manager will have access to parts in order to control inventory. A well-stocked cabinet represents a large investment. Attention to proper care will reduce pressure on parts replacement costs.
- Storage: Always store equipment (oars, shells, stretchers, tools, gas tanks, etc.) in the designated places. After the row, put away all equipment used (coach boats, engines, life jackets, water hose, stretchers, cleaning supplies etc.) Clean the gunnels and wheels before and after a row. Wet launching means sand will find its way into the boat and left unattended causes irreversible damage in one row.
- Shell Cleaning: It is impossible to keep sand and grit from getting in the boats. Sand gets into the tracks and the wheels. To maintain boats in the best (safest) operating condition it is recommended to:
  - Give the tracks and seat wheels a wipe before launching.
  - Wash the boats upon return paying special attention to the rails and seats wheels.
  - Use a clean cloth to roll the wheels
  - Treat them like your personal boats.

### **3. Water Safety at FRC**

Safety is the responsibility of rowers, coaches, instructors, and coxswains. Included in this handbook are the safety rules that apply both on and off the water.

Each active rowing member will have access to an electronic copy of the FRC Rowing and Safety Handbook through our website and understand its contents prior to participating in rowing.

All athletes and coaches in FRC rowing programs shall be offered instruction in safety procedures prior to involvement in rowing. It is the responsibility of all members/athletes to ensure they are aware of all safety procedures:

- safe boat handling,
- safe beaching/docking,
- danger areas and obstructions,
- features specific to our river, and
- to understand water emergency procedures



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Participants, and all members (including rowers, coxswains, coaches) are required to provide confirmation that they can swim and have read the FRC's Rowing and Safety Handbook.

All athletes and coaches shall respect the rights of other users of the river and obey the rowing course rules established by FRC, the Canadian Coast Guard, and the City of Fredericton (either directly, through the Parks Board, or its agencies and departments).

Athletes and coaches shall be aware of, and remain courteous to, other users at all times.

#### General Safety Considerations

Our river is home to many other users. There are vessel docks located along the rowing course with at least one large charter motor vessel in use. Both power and sail vessels enter and exit the area and rowers must be aware that vessel movement may occur at any time. Rowers should listen for engines, warning blasts as vessels leave their berths, and keep track of boat movements.

We generally use the water area on the south side of the river. We travel downstream near the shore, and then row upstream near the middle of the river, making a counter-clockwise pattern.

The shore is rocky in most places. Bridges pose a safety hazard. The river has a current (influenced sometimes by an upstream dam). There is a small tide effect.

Important - Wear bright colours at all times on the water, carry a whistle, and have a personal floatation device on board for each person in shell or boat (see Appendix B).

Note that whistles cannot be heard more than 15 metres away, but are an obligation under the law.

#### **4. Regulations**

The Canada Shipping Act, 2001 is the law that, along with its regulations, governs pleasure craft. It includes the requirements that govern the conduct of all vessels. The regulations affecting pleasure craft under this law include:

- Competency of Operators of Pleasure Craft Regulations
- Small Vessel Regulations
- Collision Regulations
- Vessel Operation Restriction Regulations
- Vessel Pollution and Dangerous Chemicals Regulations.

Canada's Criminal Code also applies to boating. Activities like operating a boat while impaired, failing to stop at the scene of an accident and operating an unseaworthy boat are crimes.

REMEMBER: Because boating laws change from time to time, make sure you have the most current information. If this GUIDE differs from the regulations, always follow the regulatory text.



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- Regulations set a minimum safety standard. Following them or an even higher standard will help make every trip a safe one.
- As the owner or operator of a pleasure craft, you may also be required to comply with additional regulations and/or laws that are specific to a sector (e.g. the Canada National Marine Conservation Areas Act).
- Posted speed limits do not apply to human powered vessels but do apply to Coaches launches: Coach/Safety boats not accompanying rowing shells must not exceed the posted speed limit.
- All operators of coach or safety boats must have their Pleasure Craft Operators Card with them. Transport Canada Coast Guard regulations change from time to time – lack of knowledge of a law is not a legal defense: it is part of your civic duty to have an understanding of the laws that are likely to impact you.
- Transport Canada's Vessel Operating Restriction Regulations are designed for open water, and not for busy near-shore waterways. Operate as though no one is obligated to give way to you. Regardless of who technically has the "right of way", you will likely lose any encounter and you or your vessel may be damaged or written off.
- Buoys are a potential hazard. Red and green buoys are placed in the river to guide boaters into the navigation channel. Though they are plastic and may cause minimal damage to rower and shell when struck, they can also break oars and cause you to flip.

#### 5. Weather Considerations

When in doubt – don't go out!

All athletes and coaches shall be aware of the potential danger from darkness, fog, high winds, ice, cold water, storms and any combination of the above.

Coaches shall be responsible for determining if conditions are too dangerous to row due to any of the above circumstances. No athlete shall be required to row against his/her better judgment should conditions be questionable.

Wind, when from the East is against the current and can create white caps; members may have difficulty with flatwater rowing equipment.

#### General guidelines of when to go out

Weather permitting, the best time to row is early morning from 5:30-7:30am.

Know Weather and Water Conditions. Always check the weather and water conditions before going out on the water. Remember that the weather can change much more quickly and more violently on the water. All athletes and coaches shall be aware of the potential danger from darkness, fog, high winds, ice, cold water, storms and any combination of the above.



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Athletes shall be responsible for determining if conditions are too dangerous to row due to any of the above circumstances. If a coach determines that it is inappropriate to row at any given moment, their decision applies to all rowers at that time and they enter that decision in the log book.

All members are asked to use common sense about going rowing in wind, hot and cold weather conditions.

- No athlete shall be required to row against his/her better judgment should conditions be questionable.
- Never leave the dock when there are white-capped waves or waves over 1 foot
- Never leave dock if you hear thunder or expect lightning.
- Never leave the dock in foggy conditions if visibility falls below 1,000 500 meters.

PERSONAL SAFETY IS PARAMOUNT AND SUPERSEDES THE SAFETY OF EQUIPMENT.

Should unsafe conditions occur during training, athletes are directed to row for the nearest accessible shoreline/dock and get off the water. The shell(s) shall be removed from the water and placed upside down on the riggers and out of the wind if possible while the athletes await rescue.

#### Rowing in Hot Weather

- Heat exhaustion and dehydration are the primary dangers.
- Maintain a high fluid level - bring 50% more water than you think you need. A wet hat will keep the body cooler.
- Wear sunglasses to reflect the glare and plenty of sunscreen.

#### Rowing in Cold Weather

- To protect against the cold, rowers and coxswains should wear layers of clothes, removing and adding as the need arises. Neoprene base layers are recommended.
- Pogies are specialized rowing mittens that cover the oar handle and the hands but still enable the rowers to grip the handle with their bare hands. They are available from RowWest.
- Sunglasses will protect your eyes from glare, spray, and cold wind.
- Restrictions in Appendix C apply when minimum air temperature and/or water temperature thresholds are not met.

#### Rowing in Wet Weather

- A single layer of water repellent fabric will stop most of the rain and waves.
- Wet weather and wind on a cold day is of the greatest concern because heat loss will increase.
- Wool and technical fabric wicks water away from the body and retains more body heat than cotton.

#### Rowing before Sunrise

FRC offers the opportunity for early morning rows. This makes rowing accessible to many as they can row prior to work or school. Though the sun is up early during the summer, much of the year sunrise isn't till after 7am meaning that a 5:30am row will have most time spent in darkness.



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Rowing in the dark (more than 30 mins before posted sunrise) is permissible under the following restrictions:

- Bow/Cox be experienced and familiar rowing on the River;
- Must be attended to by a safety boat;
- Must have lights on the boat (in conformance with Appendix B);
- Rowing is only in areas that are free of known hazards, such as mooring buoys and unlit navigational buoys; and
- When the cold weather restrictions in Appendix C are not in effect.

#### **6. Sport-Specific Safety**

Rowing without being attended to by a safety boat:

A minimum of two (2) and a maximum of four (4) 1x and/or 2x shells may row together without a safety boat, when/if permissible to FRC programming subject to the following conditions:

- Cold weather restrictions in Appendix C are not in effect;
- Only during daylight hours (not more than 30 mins before posted sunrise and not later than posted sunset);
- Shells with U19 rowers must be attended to by a safety boat;
- Only permitted for 1x and 2x shells
- In addition to the requirements in Appendix B, each shell is to have a bailer (large sponge, hat or water bottle works as a bailer);
- A cell phone (in a dry bag) is carried by at least one of the shells;
- Shells pair up, stay together and remain in visual range of each other;
- Safety briefing is required before departing

Rower's Safety Responsibilities

Before leaving the dock each rower should make a personal "Risk assessment". Examples of these questions include:

- Am I healthy and not overtired for a row today?
- Am I dressed properly for the weather and for safety?
- Do I have my lifejacket or PFD on me or in the shell?
- Do I have my whistle?
- Is the shell in good order?
  - Hatches closed and oarlocks tightened
  - Bow ball in good condition
  - The heels of any shoes cannot be lifted more than 7 cm
  - Both shoes can be released simultaneously (single point of release) with one hand
- Is there a coach boat in attendance?
- Will there be someone around to summon help if necessary?





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- Are there obvious hazards on the water? (i.e.: tourist boats, other vessels, logs and debris in the water)
- Is my rowing technique up to the current water conditions?
- Am I clear about safe havens along the rowing venue?

If the answer is NO to any of these questions, fix what can be corrected or consider not rowing that day.

While rowing, follow a routine to minimize risks of an "accident". Examples include:

- Warm up on the water.
- Look around for other on water non-motorized users, sail or motor vessel traffic.
- Keep an eye on the location of the coach boat.
- Check behind you every 3-5 strokes.
- If possible, row with a buddy or do not leave the pack.
- Re-check the water and wind conditions – are you still able to row well if these have changed?
- Know where other rowers are on the waterway.

#### Rowers Personal Equipment

- Each athlete must wear bright colours at all times on the water
- Each boat must have an athlete who has a whistle
- Each athlete must have a Personal Flotation Device (PFD) on board.

#### Rowing Clothing

- Appropriate clothing is mandatory for safety and visibility. All athletes and coxswains shall wear bright clothing to ensure visibility of the shell, particularly during low-light conditions.
- It is recommended that each athlete bring a complete change of dry clothing to each workout during the winter months.

#### Coxswain/Bow Person's Safety Responsibilities

From a Transport Canada perspective, the coxswain or in their absence, the bow person is the boat's Captain and is responsible for the actions of that boat. Cox's play an essential role in maintaining a calm and purposeful manner when working out on the water and in case of emergencies. Duties are as follows:

- Leads their crew on and off the water as well as steers the shell.
- Maintains the safety of the rowers by appropriate launching, steering and landing practices.
- Ensures safety by providing leadership in the general care of the equipment in use.
- Communicates with the coach and transmits the coaches' messages to the crew.
- Coxswains are in charge of an emergency and rescue situation - deferring to the coach when the coach boat arrives on the scene.
- Bow persons perform similar roles in coxless shells.

#### Coxswain Emergency Signal:

Coxswains or Bow person's will use the International Distress Signal



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- Wave both hands over your head.
- Use only for serious trouble.
- Use sound device (whistle) to signal for help.

#### Coxswain Non-Emergency Signal:

'Launch help required' - wave one arm over your head.

'Go on by' - wave one arm in a throwing fashion.

#### Group Practice

- Do not launch before the coach boat is started and ready to go.
- Beware of oncoming traffic
- In front of our docks the direction of traffic is random. We share the river with motorized boats, sailboats, kayaks, stand up paddleboards, outrigger canoes, and regular canoes. Swimmers/divers have also been spotted on the water at times. Be careful.

#### Inside the FRC Rowing Pattern:

- Do not stop under any bridge: these are the most congested and narrowest parts of the course. As the river curves, shells will need to adjust several times. A good tip for steering is to get lined up with where you want to go, then find a point on the shore behind the boat to align the stern to. In general, it is recommended to shoulder check every 3 - 5 strokes on alternate sides.
- Traffic may approach you at any time, particularly returning rowers from our club or others in the area.
- Be aware of swimmers: Triathletes or divers in black wetsuits may be out at any time of the season.

Anchored Boats There are many anchored boats in the river, watch for anchor lines sticking out and the mooring tourist who may have inadvertently parked in the middle of the usual rowing pattern. In general, the summer months attract more boats, with a peak during long weekends, fishing derbies or fireworks.



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#### **APPENDIX A**

#### **ON-WATER EMERGENCY ACTIONS**

The objective of a Water Emergency Action Plan:

- 1. TO SAVE LIFE**
- 2. TO PREVENT INJURY**
- 3. TO MINIMIZE DAMAGE TO EQUIPMENT**

CONSULT THE FRC EMERGENCY ACTION PLAN FOR CALL ROLES  
AND CONTACT PHONE NUMBERS

#### **Emergency action by other shells or coach boats in the vicinity:**

- Each coxswain, bow person and rower must always keep an ear open for whistle sounds or cries for help
- Respond immediately!
- In coxed shells, coxswain takes charge of the rescue, the bow person takes charge in coxless shells
- Whistle, yell, wave both arms to hail a coach boat
- Show direction of "help needed" by waving one arm
- Approach rower in water from the lee side (downwind side)
- When coach boat arrives, report how long the rower has been in the water and pass on any information about the rower's condition

#### **Emergency action by the coach/safety person in the coach boat**

- Wear your life jacket or PFD
- Approach the site into the wind to prevent the launch from being pushed into the accident and to ensure maximum control. If possible, approach so that you are between the person in the water and any oncoming traffic.
- The crew in the coach boat should never stand up in a small open unstable boat.
- Turn the motor off as soon as you are in position to bring the athlete on board. Do not leave motor in neutral, idling
- Take charge of the situation: "We are here!" Reassure rower in the water.
- Enquire: Are you OK? Any injuries?
- Get further information from coxswain or rowers of nearby shells
- Lower rescue ladder from the transom for rescue, or over the bow in a boat with a broad bow. Pulling someone in over the side of the boat may cause the safety boat to flip making things worse.
- Depending on weather and water conditions, a rower may stay warmer by getting back into their rowing shell and actively rowing compared to being exposed to wind in wet clothing.



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### APPENDIX B USE OF PERSONAL FLOATATION DEVICES, WHISTLES AND LIGHTS

#### PERSONAL FLOATATION DEVICES (PFDs)

Every participant will wear a **PFD** at all times on the water – rowers, coaches, safety boat operators, passengers, observers, etc.

Under 16 years of age the PFD must be of inherent buoyancy.

Each person should be able to don on and use the PFD correctly.

#### WHISTLE

Every boat on the water will have a sounding device – usually a pea-less whistle worn by the person in charge of the boat: single sculler, bow person, coxswain, coach, safety boat driver. The Whistle must **not** be attached to the shell – it must be on the person so that it is accessible to the rower at all times. Most rowers tuck it into their shirt or let it hang down their back.

#### LIGHTS

Lights are required by the Canada Shipping Act, 2001 (the Act) for all vessels (including vessels under oars such as rowing shells) operating in low light and poor visibility conditions, namely more than 30 minutes before posted sunrise and any time after posted sunset.

Colour, visibility and placement must be in conformance of the Act.

The safety boat must display: a red solid light on the bow's port side; a green solid light on bow's starboard side; and an all round white light on the stern.

Rowing shells are to use a blinking white light on the bow, and a solid white light on the stern.

Rowing shells are not required to use red port and green stbd lights, but if used both red and green are required and placed correctly in accordance with the Act.

Lights do not allow the participants to see where they are in the dark. The lights are there so that **others** on the water can see them and avoid them.

Ensure the lights are bright, water proof, and of good quality to use on the water.

Reflective tape shall be placed at the extremities of rowing shells (bow, stern, riggers, blades. Remember a rowing shell is approximately 25 to 62 feet (1x vs 8+) in length and 20 to 22 feet in width (blade edge to blade edge).



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### APPENDIX C RESTRICTIONS – COLD WEATHER ROWING

#### REFERENCES

- A. Historical Average Water Temperatures (ENVCAN - Saint John River Basin, NB)

Month	Water Temperature
March	-3.5°C
April	4°C
May	10°C
June	15°C
July	18°C
August	17°C
September	12.5°C
October	6.5°C
November	0.5°C

- B. Red Cross  
C. Transport Canada Safety  
D. Canadian Coast Guard (<http://hypothermia-ca.com>)  
E. Row Canada Aviron  
F. Hypothermia Guidelines & Cold Water Survival – Leo Blockley Memorial Campaign / The Foundation for Rowing Education (<http://leoblockley.org.uk>)

#### Introduction

A safe environment for all members (rowers, coaches and volunteers) is paramount and shall always take precedence over any recreational, training or competitive requirements. **Safety is everyone's responsibility** and everyone shall err on the side of caution.

Cold water and weather presents an extremely challenging and hazardous environment to the rowing community. The dangers of cold weather exposure and cold water immersion are well known, but easily underestimated, until it is too late unless prudent precautions are taken in advance to help mitigate (not eliminate) these risks.

#### What is Hypothermia?

Hypothermia is a potentially dangerous drop in *body temperature*, usually caused by prolonged exposure to cold temperatures. The risk of cold exposure increases as the winter months arrive. But, if you're exposed to cold temperatures on a spring row or capsized in the summer, you can also be at risk of hypothermia. Heat loss can be **25 times faster in water** than in air. When the water is less than



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### APPENDIX C RESTRICTIONS – COLD WEATHER ROWING

10°C, rowers and coxies that enter the water have only a short period of time (matter of minutes) before they start to suffer from hypothermia and shock.

Normal body temperature averages 98.6°F (37°C) degrees. With hypothermia, core temperature drops below 95°F degrees (35°C). In severe hypothermia, core body temperature can drop to 82°F (27.8°C) or lower.

#### What happens when you are in cold water?

Submersion in cold water is extremely dangerous. Depending on the coldness of the water, **loss of muscle function and mental confusion can occur within minutes**. More specifically;

- Your skin and blood temperature in your arms and legs drop quickly
- You start shivering
- You may have trouble breathing and be unable to use your hands
- The temperature of your heart, brain, and other organs drops gradually
- You may become unconscious, and if you are in the water, you may drown
- If your body temperature drops further, you can die of heart failure (*Red Cross*)
- **In cold water we are all poor swimmers and you quickly get dead cold in water**
- **If you get dead cold in water with no lifejacket – you get dead (you will die!)**

#### What must rowers do in cold conditions to protect themselves?

Rowers and coaches must always be prepared “**what if**” and dress properly for the time of year. It is strongly suggested that long tights and long sleeves be worn when on the on-water temperature drops below 10°C.

Athletes should layer clothing to be able to properly stay warm, warm-up, remove layers as necessary throughout the practice and then to re-layer in cool-down.

#### Suggested cold weather gear (Wick, Warmth and Weather):

- Wear a wicking fabric next to your skin, insulating layers of fleece or wool, then an outer layer made of windproof, watertight materials.
- Snug fitting long tights and long sleeve shirts
- Long sleeve shirt that is long enough to stay tucked in, covering the lower back at all times
- Outer shell to break the wind
- Toque (and pogies, especially in warm-up/cool-down periods)
- Plenty of water
- Sunglasses
- No cotton. When wet it is worthless as an insulator and heavy



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**APPENDIX C**  
**RESTRICTIONS – COLD WEATHER ROWING**

**Safety Thresholds**

The following thresholds constitute the FRC’s cold weather rowing restrictions at the SCAC location. All members (rowers, coaches, board members, volunteers and parents) shall abide by these cold weather safety thresholds and error on the side of caution (round actual values down):

FRC Hazard Level	FRC PROTOCOL	Air & Wind Chill	Water	Water Hypothermia Index	Expected Time Before Exhaustion or Unconscious	Wind & Direction (kmh)
SEVERE	<b>NO ROWING</b>	Below 0°C	Below 5°C	Extreme-Severe	15-30 minutes	N/A
HIGH	COLD WEATHER RESTRICTIONS IN EFFECT	0°C to 5°C	5°C to 10°C	High	30-60 minutes	East: < 5 West: < 10 North: <10 South: < 10 Gusts < +5
CAUTION	Normal RCA/FRC Safety Protocols	Above 5°C	Above 10°C	Medium-Low	60-120 minutes	East: < 10 West: < 15 North: < 15 South: < 15 Gusts < +5

Hazard Level HIGH rowing is only authorized ~~under~~ **only** for the most experienced rowers and safety personnel who meet all of the following:

1. Preparing for upcoming competitions and qualifications under the direct on-water supervision of a FRC sanctioned certified coach (with local and cold water experience);
2. Have no recent history of frequently overturning a shell;
3. Demonstrated consistent compliance with the FRC code of conduct, safety and PFD policies;
4. Attended the FRC’s cold weather safety workshop and signed an Informed Assumption of Enhanced Risk and Acknowledge Waiver (parents/guardians for rowers under 19 years); and
5. Have the FRC Board’s approval.

A thorough **safety briefing (practical discussion with confirmation questions & answers )** shall be conducted by the senior safety boat operator and/or lead coach **prior** to going on the water with specific emphasis on the:

1. Current and forecasted water, air, wind conditions, hypothermia index and times;
2. Purpose and objective of the session;
3. Operating boundaries (geographical and climatic);



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### APPENDIX C RESTRICTIONS – COLD WEATHER ROWING

4. Pre-determined emergency plan with all duties, responsibilities and actions specific to cold weather and hypothermia to ensure “everyone” (all rowers, coaches and safety crews) understand the environmental risks and the timely sequence of events needed in response to an emergency;
5. Criticality of quick recovery and medical assistance for the immersed rower(s); and
6. Priority shall be getting any immersed rower(s) ashore and rewarmed. Recovery of shells is a secondary consideration afterwards, which may result in damage or a complete loss of the rowing shell(s).

All rowers, coaches and safety personnel **SHALL** complete the FRC Cold Weather Pre-Rowing Checklists and Boat House Logs.

All rowers **MUST** be adequately dressed for cold weather rowing.

All Rowers **MUST WEAR PFDs** and whistles.

All Rowers **UNDER 16** years of age **MUST WEAR INHERENT BUOYANCY PFDs**.  
**PUTTING ON A PFD AFTER FALLING INTO COLD WATER IS ALMOST IMPOSSIBLE – SO YOU MUST WEAR IT.**

All rowers **MUST** be accompanied by a safety boat when the water temperature is below 10°C.

All rowers **MUST STAY TOGETHER** and close to the shoreline **WITH THEIR ASSIGNED SAFETY BOAT**.

The safety boat must be equipped with the appropriate number of emergency blankets and warm clothes (hats, mits and socks) as per the safety checklist herein for every rower in the largest shell (including cox) on the water.

There **MUST** be a working cell phone in every Safety and Coach Boat, that can be used in an emergency to summon assistance.

The numbers of rowers in any shell on the water **MUST NEVER EXCEED** the total free seating capacity of the safety boat(s). The weight and passenger capacity of each safety boat is clearly stated on its Transport Canada Compliance label. The qualifications and experience of the safety boat personnel may further reduce the number of rowers that can be supervised and rescued at a time. It is critical that all rowers in the largest shell can be rescued immediately and not dependent on the safety boat(s) performing multiple trips ashore.

The number of shells being supervised by a safety boat **MUST BE LIMITED** to ensure close contact between all crews and the safety boat at all times.





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### **APPENDIX C RESTRICTIONS – COLD WEATHER ROWING**

Additionally, cold weather rowing shall not be permitted:

1. more than 30 mins before posted time of sunrise and not after the posted time of sunset;
2. when visibility is less than or forecasted to be less than 500m;
3. water levels above 4.5m (swift water conditions)

#### **SAFETY BOAT PRIORITIES**

1. **FIRST - SAFETY (proactively before, during and after)**
2. **SECOND - RESCUE/RECOVERY (all personnel first, before any equipment)**
3. **THIRD - COACHING**

#### **IF YOU ARE EVER IN DOUBT ..... SPEAK UP IMMEDIATELY,!!!**

**Do not blindly follow, rely on or assume the more experienced, older rower or coach knows best.**

**If you feel uneasy, uncomfortable or something doesn't look/sound right ..... listen to yourself and don't ignore your internal self-preservation and survival instinct !!!**



## **SAFETY HANDBOOK**

### **Fredericton Rowing Club**

## **APPENDIX C**

### **RESTRICTIONS – COLD WEATHER ROWING**

#### COLD WEATHER SAFETY CHECKLIST

##### Safety Boat Crew

1. Boots / Gloves / Hats
2. Inherent buoyancy or Auto-Inflatable PFDs or Survival overalls/jackets;
3. Cell phone and emergency phone numbers in waterproof bag;
4. VHF Radio (if available and fully charged battery)
5. Total number of rowers plus safety crew does not exceed safety boat rated capacity
6. Boat House Logs are completed prior to departing the dock;

##### Safety Boat Equipment Verification:

1. Sufficient fuel;
2. Prop is not damaged and shift smoothly;
3. Engine starts and running properly (sounds, smell, cooling water discharge);
4. Set of oars / paddles;
5. 2 balers;
6. Bow and stern lines;
7. Rescue ladder(s);
8. Spare anchor with 10m of line for capsized shell;
9. Waterproof flashlight;
10. Towing bridle;
11. First Aid Aid;
12. Number of dry emergency inherent buoyancy PFDS, blankets, hats, mits and socks that equals/exceeds total number of rowers on the water, all stored in Dry Bags or sealed waterproof bin(s).

##### Each Rower:

1. Dressed appropriately (including a toque, socks and gloves - pogies);
2. Have a complete set of emergency warm dry warm clothes (including socks, mitts, hat, towel) in the boat house .... not just a spare set of workout gear!
3. Wearing a PFD;
4. Wearing a whistle;
5. Potable water;
6. Completed their equipment sign-outs;
7. Understands the hypothermia risk and emergency response plan

##### Boat House:

A rewarming first aid station shall be pre-established upstairs with at least the following:

1. Large dry clean towels;
2. Warm blankets;
3. First aid kit and AED;
4. yoga mats;
5. VHF radio and phone.

**Note:** No shell departs the dock without the safety boat(s) launched, equipped; crewed and running at the dock.