

## 9. Topics Covered in Risk Assessments

The process of undertaking risk assessments can be made simpler by considering the various topics. This section of RowSafe identifies those topics, gives some general guidance and outlines some potential Hazards, Barriers, Hazardous Events and Controls.

Risk Management Plans are a step in developing a Risk Assessment. They list Hazards and possible Hazardous Events, together with Barriers (to reduce the probability of Hazardous Event occurring) and Controls (to reduce the severity of harm should a Hazardous Event occur).

These terms are explained in the suite of online learning modules on [Safety Basics](#), [Intermediate Risk Management](#) and [Advanced Risk Assessment](#).

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### Further Information

- Safety Basics - [rowhow.org/free/riskassessment/basiclatestversion](http://rowhow.org/free/riskassessment/basiclatestversion)
- Intermediate Risk Management - [rowhow.org/free/riskassessment/intermediate](http://rowhow.org/free/riskassessment/intermediate)
- Advanced Risk Assessment - [rowhow.org/free/riskassessment/advanced](http://rowhow.org/free/riskassessment/advanced)

## 9.1 Weather

Rowing activities are affected by the current local conditions. It is important to know about the expected weather conditions at the time of an outdoor activity. These conditions include wind strength and direction, visibility, temperature, and precipitation. These considerations should be incorporated into the Risk Assessment.

### Expectations

#### Everyone

Everyone is expected to:

- Learn about local weather peculiarities.
- Be aware of personal limitations, rules and guidelines associated with the weather conditions.
- Assess the weather for the duration and type of outing they are undertaking.
- Respect the individual concerns and capabilities of other crew members if boating in adverse conditions.

#### Club

Club Officers are expected to:

- Set out rules and guidelines for outings covering:
  - Local weather conditions.
  - Assessment of unsafe rowing conditions by boat type and rowers' abilities to include:
    - Weather, including lightning.
    - Temperature.
  - Persons authorised to allow, restrict or stop boating activities.
- Provide information to members as appropriate.
- Implement a process to inform members what activities are currently restricted.
- Amend Risk Assessments and Safety Plans to take account of any advice or direction provided by local navigation or other relevant water authority relating to local weather conditions.
- Adopt the [30:30 rule on lightning](#).
- Suspend or curtail boating activities where the conditions are assessed as unsafe.

## Coaches

Coaches are expected to:

- Learn about local weather peculiarities, and local rules of navigation particularly when visiting unfamiliar venues.
- Assess the weather conditions for the duration and type of outing they are leading.
- Amend outing plans to take account of any updated advice relating to local weather conditions.
- Consider each crew member's personal limitations, limitations of their equipment and safety facilities available.
- Respect the individual concerns and capabilities of all crew members if boating in adverse conditions.
- Ensure that the whole crew is aware of, and understands, the rules and guidelines for the activity being undertaken.
- Ensure that the whole crew, including the coxswain, is suitably dressed and adequately protected for the weather conditions (wet, hot or cold) that they are likely to encounter.
- [Adopt the 30:30 rule on lightning.](#)
- Understand the causes, symptoms and effects of hypothermia and hyperthermia.

## Event

Event Officers and Organising Committees are expected to:

- Establish a process to inform participants of any activities that are currently restricted.
- Ensure there are facilities for competitors, support staff and officials to cope with the expected weather conditions.
- Monitor the weather conditions leading up to and throughout the event.
- Provide information to competitors covering:
  - Local weather conditions.
  - Procedure to stop or suspend racing in total or by class of event.
- Amend Risk Assessments and Safety Plans to take account of any advice or direction provided by local navigation or other relevant water authority relating to local weather conditions.
- Ensure that rules and guidelines are observed.
- Suspend or curtail the event if conditions are assessed as unsafe.
- Establish a boating schedule that ensures that there are no long periods of exposure to cold or hot weather.

## Regional Rowing Councils

Regional Rowing Councils are expected to:

- Review incidents in the region.
- Provide advice to clubs and events on safety.

## British Rowing

### British Rowing:

- Provides guidance to clubs through RowSafe.
- Provides an [Incident Reporting System](#).
- Provides [Safety Alerts](#) and other safety communications.
- Provides safety training material on its website.
- Provides courses that include safety.

## Further Information

- Safety Alert - Cold Water Kills, <https://www.britishrowing.org/wp-content/uploads/2015/09/Safety-Alert-Cold-Water-Kills-1.pdf>
- British Rowing Incident Reporting System - [incidentreporting.britishrowing.org](http://incidentreporting.britishrowing.org)
- Safety Alert Archive - [britishrowing.org/knowledge/safety/safety-alert-archive](http://britishrowing.org/knowledge/safety/safety-alert-archive)
- The 30:30 rule on lightning - <http://www.rospa.com/leisure-safety/advice/lightning/>
- Cold Water and Hypothermia on-line learning module - <https://www.britishrowing.org/knowledge/online-learning/safety/cold-water-and-hypothermia/>

## Example Risk Management Plan

### Hazards associated with the weather

Hazard	Barriers	Hazardous Events	Controls
Hot sunny weather	<ul style="list-style-type: none"> <li>Avoid outings in the middle of the day</li> <li>Adjust activity levels to suit conditions</li> <li>Rest in shade (e.g. under bridges, in the shade of a tree)</li> <li>Wear appropriate clothing (thin, breathable)</li> <li>Use water for cooling</li> </ul>	Hyperthermia (sun stroke)	<ul style="list-style-type: none"> <li>Move into a cooler area, remove outer clothing</li> <li>Use shower with cool, not cold, water or cool in river/ lake</li> <li>Seek medical treatment if severe</li> </ul>
	<ul style="list-style-type: none"> <li>Use sunscreen</li> <li>Avoid outings in the middle of the day</li> <li>Wear appropriate clothing (hat and covered arms, etc.)</li> </ul>	Sunburn	<ul style="list-style-type: none"> <li>Use after sun cream</li> <li>Seek medical treatment if severe</li> </ul>
	<ul style="list-style-type: none"> <li>Carry water and drink regularly</li> </ul>	Dehydration	<ul style="list-style-type: none"> <li>Continue to drink, carry drinking water</li> <li>Seek medical treatment if severe</li> </ul>
Cold weather	<ul style="list-style-type: none"> <li>Wear appropriate clothing (including hats and pogies)</li> <li>Structure activity levels to keep warm</li> <li>Monitor crew comfort (particularly coxes)</li> <li>Shorten outing as needed</li> <li>Use coxless rather than coxed boats</li> </ul>	Hypothermia (see <a href="#">Cold Water and Hypothermia online course</a> and <a href="#">Safety Alert - Cold Water Kills</a> )	<ul style="list-style-type: none"> <li>Move into warmer area and warm gradually</li> <li>Provide warm (not hot) drink</li> <li>Seek medical treatment if severe or if in doubt</li> </ul>
	<ul style="list-style-type: none"> <li>Training and capsizing/man overboard drills</li> <li>Good explanations of cold shock and its short term effects.</li> </ul>	Cold shock	<ul style="list-style-type: none"> <li>Training</li> <li>Rescue training</li> </ul>
	<ul style="list-style-type: none"> <li>Avoid rowing at times or in places where significant ice is expected.</li> </ul>	Ice causing inability to row or boat damage	<ul style="list-style-type: none"> <li>Use throw lines and launch to tow boat clear of ice</li> </ul>

Hazard	Barriers	Hazardous Events	Controls
Strong winds	<ul style="list-style-type: none"> <li>• Use larger boats (4x rather than 1x)</li> <li>• Use more stable boats</li> <li>• Fit stabilisers (adaptive rowing floats) to boats</li> <li>• Have mixed crews (Mix Juniors/inexperienced rowers with more experienced rowers)</li> <li>• Coach good technique</li> <li>• Avoid holding crews in unstable positions</li> </ul>	Capsize	<ul style="list-style-type: none"> <li>• Rescue with launch</li> <li>• Teach capsize drill and buddy rescue technique</li> <li>• Use Lifejacket or buoyancy aid</li> </ul>
	<ul style="list-style-type: none"> <li>• Restrict rowing to sheltered areas</li> <li>• Have mixed crews (Mix Juniors/inexperienced rowers with more experienced rowers)</li> </ul>	Man overboard from gig	<ul style="list-style-type: none"> <li>• Rescue with gig</li> <li>• Rescue with safety boat</li> <li>• Teach man overboard drill</li> <li>• Wear lifejacket or buoyancy aid</li> <li>• Carry life ring and throwline</li> </ul>
	<ul style="list-style-type: none"> <li>• Avoid being upwind of hazards (circulation plan?)</li> <li>• Keep a good look out</li> <li>• Use coxed rather than coxless boats</li> <li>• Avoid being close to the downwind bank</li> </ul>	Blown into bank, pontoon, bridge, shallows, etc.	<ul style="list-style-type: none"> <li>• Have safety boat and throw lines available to rescue rowers and recover boat</li> <li>• Use throw lines from the bank to pull the boat clear.</li> <li>• Carry first aid kit and radio or mobile phone to contact emergency services</li> <li>• Have trained first aiders available</li> </ul>
	<ul style="list-style-type: none"> <li>• Stay upwind of the boathouse</li> <li>• Use larger, faster boats (4x rather than 1x)</li> <li>• Mix Juniors with experienced, fit adults</li> </ul>	Cannot get back to boathouse against the wind	<ul style="list-style-type: none"> <li>• Have a safety boat available for towing</li> <li>• Land boat somewhere else and carry it back await improved conditions</li> </ul>
	<ul style="list-style-type: none"> <li>• Use anchor to hold position</li> <li>• Row in sheltered areas</li> </ul>	Drifting in strong winds	<ul style="list-style-type: none"> <li>• Carry tow rope for being towed to safety</li> </ul>

Hazard	Barriers	Hazardous Events	Controls
Lightning	<ul style="list-style-type: none"> <li>• Avoid rowing when lightning is present or forecast</li> <li>• Get off the water asap if lightning starts or hide under a bridge</li> <li>• Adopt the 30:30 rule on lightning</li> </ul>	Struck by lightning causing burns or electrocution.	
Poor visibility caused by fog or very heavy rain	<ul style="list-style-type: none"> <li>• Avoid rowing far from land when fog is present or forecast</li> <li>• Coach scullers and steers persons to keep a good lookout</li> <li>• Local knowledge</li> <li>• Know and understand the <a href="#">lights</a> and sound signals on navigation marks</li> <li>• At sea, avoid rowing in poor visibility</li> </ul>	Collision with the bank or other fixed object	<ul style="list-style-type: none"> <li>• Train rowers to check the equipment then (if OK) to walk the boat back into deeper water and row away</li> <li>• Train rowers what to do if the equipment is damaged</li> <li>• Have safety boat and throw lines available to rescue rowers and recover boat</li> <li>• Use throw lines from the bank to pull the boat into the bank (or shallow water)</li> <li>• Carry first aid kit and radio or mobile phone to contact emergency services</li> <li>• Have trained first aiders available</li> </ul>
	<ul style="list-style-type: none"> <li>• Avoid rowing far from land when fog is present or forecast</li> <li>• Coach scullers and steers persons to keep a good lookout and listen out for other boats</li> <li>• Follow rules of the road (river)</li> <li>• Local knowledge</li> <li>• Know and understand the <a href="#">lights</a> and <a href="#">sound signals</a> used by other vessels.</li> <li>• At sea, check for large ship movements with VTS or port control</li> <li>• At sea avoid rowing in poor visibility</li> </ul>	Collision with another boat	<ul style="list-style-type: none"> <li>• Have safety boat and throw lines available to rescue rowers and recover boat</li> <li>• Use throw lines from the bank to pull the boat into the bank (or shallow water)</li> <li>• Carry first aid kit and radio or mobile phone to contact emergency services</li> <li>• Have correctly fitted backstays on the forward port and starboard rigger as these tend to reduce the severity of impacts with the rigger</li> <li>• Have trained first aiders available</li> </ul>

Hazard	Barriers	Hazardous Events	Controls
Poor visibility caused by fog or very heavy rain	<ul style="list-style-type: none"> <li>Avoid rowing far from land when fog is present or forecast</li> <li>Avoid rowing in fog or when fog is forecast</li> </ul>	Inability to find way back	<ul style="list-style-type: none"> <li>Use radio or other means to contact the navigation authority or club</li> <li>Use navigation lights to make boat easier to find</li> </ul>
Poor visibility caused by darkness	<ul style="list-style-type: none"> <li>Avoid rowing in dark areas</li> <li>Safety boat in attendance with spot lights</li> <li>Know and understand the <a href="#">lights</a> and sound signals on navigation marks</li> <li>Avoid rowing or sculling without a cox in darkness</li> <li>At sea, avoid rowing in darkness</li> </ul>	Collision with the bank or other fixed object	<ul style="list-style-type: none"> <li>Train rowers to check the equipment then (if OK) to walk the boat back into deeper water and row away</li> <li>Train rowers what to do if the equipment is damaged</li> <li>Have safety boat and throw lines available to rescue rowers and recover boat</li> <li>Use throw lines from the bank to pull the boat into the bank (or shallow water)</li> </ul>
	<ul style="list-style-type: none"> <li>Fit navigation lights (and check that they are working)</li> <li>Avoid rowing in dark areas</li> <li>Safety boat in attendance with spot lights</li> <li>Know and understand the <a href="#">lights</a> and <a href="#">sound signals</a> used by other vessels</li> <li>Avoid rowing or sculling without a cox in darkness</li> <li>At sea, avoid rowing in the darkness</li> </ul>	Collision with another boat	<ul style="list-style-type: none"> <li>Carry first aid kit and radio or mobile phone to contact emergency services</li> <li>Have trained first aiders available</li> <li>Have safety boat and throw lines available to rescue rowers and recover boat</li> <li>Use throw lines from the bank to pull the boat into the bank (or shallow water)</li> <li>Carry first aid kit and radio or mobile phone to contact emergency services</li> <li>Have trained first aiders available</li> </ul>



## 9.2 The Rowing Environment

Rowing activities are affected by the current local conditions. It is important to understand the local environment, including local hazards and the circulation plan and also to take account of current conditions like temporary hazards and changes to the circulation plan. These considerations should be incorporated into the Risk Assessment.

### Expectations

#### Everyone

Everyone is expected to:

- Learn about local hazards, local rules of navigation and navigation marks particularly when visiting unfamiliar venues.
- Be aware of personal limitations and the local conditions, rules and guidelines.
- Respect the individual concerns and capabilities of other crew members if boating in adverse conditions.

#### Club

Club Officers are expected to:

- Set out rules and guidelines for outings covering:
  - Local navigation rules.
  - Assessment of unsafe rowing conditions by boat type and rowers' abilities to include:
    - Current/stream and tides.
    - Rowing or sculling in the dark or in poor visibility including lighting requirements.
  - Persons authorised to allow, restrict or stop boating activities.
- Provide information to members as appropriate.
- Implement a process to inform members what activities are currently restricted.

Learn about rules of navigation



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- Set up a communication network with the local navigation authority and communicate relevant information to members.
- Agree restrictions on boating activities with other water users.
- Ensure that rules and guidelines are observed.
- Suspend or curtail boating activities where the conditions are assessed as unsafe.

## Coaches

Coaches are expected to:

- Learn about local hazards, local rules of navigation and navigation marks particularly when visiting unfamiliar venues.
- Consider each crew member's personal limitations, limitations of their equipment and safety facilities available.
- Respect the individual concerns and capabilities of all crew members if boating in adverse conditions.
- Ensure that the whole crew is aware of, and understands, the rules and guidelines for the activity being undertaken.

## Event

Event Officers and Organising Committees are expected to:

- Establish a process to inform participants of any activities that are currently restricted.
- Provide information to competitors covering local navigation rules.
- Ensure that rules and guidelines are observed.
- Suspend or curtail the event if conditions are assessed as unsafe.

## Regional Rowing Councils

Regional Rowing Councils are expected to:

- Facilitate contact between local clubs and navigation authorities in relation to local hazards.
- Review incidents in the region.
- Provide advice to clubs and events on safety.

## British Rowing

British Rowing:

- Provides guidance to clubs through RowSafe.
- Provides an [Incident Reporting System](#).
- Provides [Safety Alerts](#) and other safety communications.
- Provides safety training material on its website.
- Provides courses that include safety.

## Further Information

- British Rowing Incident Reporting System - [incidentreporting.britishrowing.org](http://incidentreporting.britishrowing.org)
- Safety Alert Archive - [britishrowing.org/knowledge/safety/safety-alert-archive](http://britishrowing.org/knowledge/safety/safety-alert-archive)

## Example Risk Management Plan

### Hazards associated with the local environment

Hazard	Barriers	Hazardous Events	Controls
Bends in river or lake	<ul style="list-style-type: none"> <li>• Coach scullers and steers persons to keep a good lookout</li> <li>• Coach good steering</li> <li>• Coxed rather than coxless</li> <li>• Circulation plan</li> <li>• Lookout on bank or launch</li> <li>• Local knowledge</li> </ul>	Collision with bank	<ul style="list-style-type: none"> <li>• Train rowers to check the equipment then (if OK) to walk the boat back into deeper water and row away</li> <li>• Train rowers what to do if the equipment is damaged</li> <li>• Have safety boat and throw lines available to rescue rowers and recover boat</li> <li>• Use throw lines from the bank to pull the boat into the bank (or shallow water)</li> <li>• Carry first aid kit and radio or mobile phone to contact emergency services</li> <li>• Have trained first aiders available</li> </ul>
	<ul style="list-style-type: none"> <li>• Coach scullers and steers persons to keep a good lookout</li> <li>• Coach good steering</li> <li>• Coxed rather than coxless</li> <li>• Circulation plan</li> <li>• Follow rules of the road (river)</li> <li>• Lookout on bank or launch</li> <li>• Local knowledge</li> </ul>	Collision with another boat on the water	<ul style="list-style-type: none"> <li>• Have safety boat and throw lines available to rescue rowers and recover boat</li> <li>• Use throw lines from the bank to pull the boat into the bank (or shallow water)</li> <li>• Carry first aid kit and radio or mobile phone to contact emergency services</li> <li>• Have trained first aiders available</li> </ul>

Hazard	Barriers	Hazardous Events	Controls
Stationary objects in or near the water e.g. bridge, pontoon, overhanging trees, locks, moored boats, buoys, rocks, shoals, shallows, other submerged objects, etc.	<ul style="list-style-type: none"> <li>• Coach scullers and steers persons to keep a good lookout</li> <li>• Coach good steering</li> <li>• Coxed rather than coxless</li> <li>• Circulation plan</li> <li>• Follow rules of the road (river)</li> <li>• Lookout on bank or launch</li> <li>• Local knowledge</li> <li>• Understand the meaning of local navigation marks (e.g. buoys, etc.)</li> </ul>	Collision with a stationary object on the water	<ul style="list-style-type: none"> <li>• Have safety boat and throw lines available to rescue rowers and recover boat</li> <li>• Use throw lines from the bank to pull the boat into the bank (or shallow water)</li> <li>• Carry first aid kit and radio or mobile phone to contact emergency services</li> <li>• Have trained first aiders available</li> <li>• On gigs, carry a tow line to tow the boat to safety</li> <li>• Rescue gig crew and tow boat to safety</li> </ul>
	<ul style="list-style-type: none"> <li>• As above +</li> <li>• Avoid being upstream or upwind of the stationery object.</li> </ul>	Swept or blown into stationary object on the water	<ul style="list-style-type: none"> <li>• Use Rescue boat and throw-lines</li> <li>• Evacuate crew to land</li> <li>• On gigs, carry a tow line to tow the boat to safety</li> <li>• Rescue gig crew and tow boat to safety</li> </ul>
Weirs & sluices	<ul style="list-style-type: none"> <li>• Ensure that weirs and sluices are marked on local maps</li> <li>• Keep well upstream of warning markers</li> <li>• Keep further clear in strong stream conditions</li> </ul>	Swept over weirs or through sluices	<ul style="list-style-type: none"> <li>• Use Rescue boat and throw-lines</li> <li>• Evacuate crew to land</li> </ul>
Steep banks or walls (makes landing difficult) or reeds or overhanging trees extending over a large length of bank.	<ul style="list-style-type: none"> <li>• Avoid areas with steep banks or high walls.</li> <li>• Practice buddy rescue technique (to avoid the need to land)</li> </ul>	Unable to land from boat if capsized, etc.	<ul style="list-style-type: none"> <li>• Have safety boat and throw lines available to rescue rowers and recover boat</li> <li>• Teach capsize drill and buddy rescue technique</li> <li>• Use Lifejacket or buoyancy aid</li> </ul>

Hazard	Barriers	Hazardous Events	Controls
Reeds or overhanging trees near bank	<ul style="list-style-type: none"> <li>Avoid stopping upwind of reeds or overhanging trees</li> </ul>	Blown or swept into reeds or trees (usually scullers)	<ul style="list-style-type: none"> <li>Have safety boat and throw lines available to tow boat clear</li> <li>Teach other scullers rescue technique</li> </ul>
Mud flats	<ul style="list-style-type: none"> <li>Show any mudflats on map</li> <li>Keep clear of mudflats near low tide</li> </ul>	Running aground and being unable to get off before outgoing tide falls	<ul style="list-style-type: none"> <li>Have process to get people off mudflats</li> </ul>

## 9.3 The Water

Rowing activities are affected by the current local conditions. It is important to understand the local water conditions, including local hazards and the circulation plan and also to take account of current conditions regions where flow speed is high. These considerations should be incorporated into the Risk Assessment.

### Expectations

#### Everyone

Everyone is expected to:

- Learn about local hazards such as rough water, fast flowing water, areas of shallow water and water borne hazards, local rules of navigation and navigation marks particularly when visiting unfamiliar venues.
- Be aware of personal limitations and the local conditions, rules and guidelines.
- Respect the individual concerns and capabilities of other crew members if boating in adverse conditions.
- Understand what measures to take to deal with water that is polluted or where blue-green algae or Weil's disease is present (see [RowSafe 8.4](#)).

#### Club

Club Officers are expected to:

- Set out rules and guidelines for outings covering:
  - Local navigation rules.
  - Assessment of unsafe rowing conditions by boat type and rowers' abilities to include:
    - Current/stream and tides
    - Rough water
    - Areas of shallow water
    - Pollution, blue-green algae and Weil's Disease
  - Persons authorised to allow, restrict or stop boating activities
- Provide information to members as appropriate.
- Implement a process to inform members what activities are currently restricted.
- Set up a communication network with the local navigation authority and communicate relevant information to members.
- Agree restrictions on boating activities with other water users.
- Ensure that rules and guidelines are observed.
- Suspend or curtail boating activities where the conditions are assessed as unsafe.

## Coaches

Coaches are expected to:

- Learn about local hazards associated with water conditions, local rules of navigation and navigation marks particularly when visiting unfamiliar venues.
- Consider each crew member's personal limitations, limitations of their equipment and safety facilities available.
- Respect the individual concerns and capabilities of all crew members if boating in adverse conditions.
- Ensure that the whole crew is aware of, and understands, the rules and guidelines for the activity being undertaken.
- Ensure that the crew understands the procedures to be followed if the water is polluted or blue-green algae or Weil's Disease is present.

## Event

Event Officers and Organising Committees are expected to:

- Establish a process to inform participants of any activities that are currently restricted.
- Provide information to competitors if the water is contaminated.
- Ensure that rules and guidelines are observed.
- Suspend or curtail the event if conditions are assessed as unsafe.

## Regional Rowing Councils

Regional Rowing Councils are expected to:

- Review incidents in the region.
- Provide advice to clubs and events on safety.

## British Rowing

British Rowing:

- Provides guidance to clubs through RowSafe.
- Provides an [Incident Reporting System](#).
- Provides [Safety Alerts](#) and other safety communications.
- Provides safety training material on its website.
- Provides courses that include safety.

## Further Information

- [RowSafe 8.4](#) - Waterborne Infections and Diseases
- British Rowing Incident Reporting System - [incidentreporting.britishrowing.org](https://incidentreporting.britishrowing.org)
- Safety Alert Archive - [britishrowing.org/knowledge/safety/safety-alert-archive](https://britishrowing.org/knowledge/safety/safety-alert-archive)
- Cold Water and Hypothermia on-line learning module - <https://www.britishrowing.org/knowledge/online-learning/safety/cold-water-and-hypothermia/>

- Information on flow over weirs - <https://www.youtube.com/watch?v=EYI67uZkNvQ>
- Safety Alert - Cold Water Kills, <https://www.britishrowing.org/wp-content/uploads/2015/09/Safety-Alert-Cold-Water-Kills-1.pdf>

## Example Risk Management Plan

### Hazards associated with the water

Hazard	Barriers	Hazardous Events	Controls
Rough Water	<ul style="list-style-type: none"> <li>• Use larger boats (4x rather than 1x)</li> <li>• Use more stable boats</li> <li>• Fit stabilisers (adaptive rowing floats) to boats</li> <li>• Have mixed crews (Mix Juniors/ inexperienced rowers with more experienced rowers)</li> <li>• Coach good technique</li> <li>• Avoid holding crews in unstable positions</li> <li>• Restrict rowing to sheltered areas</li> </ul>	Capsize	<ul style="list-style-type: none"> <li>• Rescue with launch</li> <li>• Teach capsize drill and buddy rescue technique</li> <li>• Use Lifejacket or buoyancy aid</li> </ul>
	<ul style="list-style-type: none"> <li>• Avoid areas of rough water</li> <li>• Fit wash boards</li> <li>• Use a bailer to prevent water accumulation</li> </ul>	Swamping	<ul style="list-style-type: none"> <li>• Have safety boat and throw lines available to rescue rowers and recover boat</li> <li>• Use throw lines from the bank to pull the boat into the bank (or shallow water)</li> <li>• Row or tow boat to shore then carry or tow empty boat to boathouse or relaunch and row back</li> <li>• Adequate boat buoyancy</li> </ul>
	<ul style="list-style-type: none"> <li>• Restrict rowing to sheltered waters</li> <li>• Have mixed crews (Mix juniors/inexperienced rowers with more experienced rowers)</li> </ul>	Man overboard from gig	<ul style="list-style-type: none"> <li>• Rescue with gig</li> <li>• Rescue with safety boat</li> <li>• Teach man overboard drill</li> <li>• Wear lifejacket or buoyancy aid</li> <li>• Carry life ring and throwline</li> <li>• Inflate lifejacket.</li> </ul>



Hazard	Barriers	Hazardous Events	Controls
Rough Water	<ul style="list-style-type: none"> <li>• Avoid rowing in rough water.</li> <li>• Take extra care approaching the shore where the shallowness of water increases the wave height.</li> <li>• Do not allow the Gig to become beam-on to the waves.</li> </ul>	Swamping or capsize of a Gig (traditional wooden gigs have very little inherent buoyancy)	<ul style="list-style-type: none"> <li>• Operate a buddy systems and rescue with another gig.</li> <li>• Rescue with a safety boat</li> <li>• If necessary, call the coastguard and request lifeboat support.</li> <li>• Fit boats with buoyancy bags to provide extra buoyancy and stay with the boat until rescued.</li> <li>• Tow the boat back to the shore.</li> </ul>
Fast Flowing water	<ul style="list-style-type: none"> <li>• Avoid being upstream of hazards (circulation plan?)</li> <li>• Keep a good look out</li> <li>• Use coxed rather than coxless boats</li> </ul>	Swept over weir or into bridge, pontoon, shallows, etc.	<ul style="list-style-type: none"> <li>• Use Rescue boat and throw-lines</li> <li>• Evacuate crew to land</li> </ul>
	<ul style="list-style-type: none"> <li>• Stay upstream of the boathouse</li> <li>• Use larger, faster boats (4x rather than 1x)</li> <li>• Mix Juniors with experienced, fit adults</li> </ul>	Cannot get back to boathouse against stream	<ul style="list-style-type: none"> <li>• Have a safety boat available for towing</li> <li>• Land boat somewhere else and carry it back await improved conditions</li> </ul>
Areas of Shallow water (permanent or tidal)	<ul style="list-style-type: none"> <li>• Provide information on areas of shallow water</li> <li>• Avoid areas of shallow water hazards (circulation plan?)</li> <li>• Keep a good look out</li> <li>• Use coxed rather than coxless boats</li> <li>• Be aware of the tide times and heights and plan accordingly</li> </ul>	Grounding	<ul style="list-style-type: none"> <li>• Train rowers to check the equipment then (if OK) to walk the boat back into deeper water and row away</li> <li>• Train rowers what to do if the equipment is damaged</li> </ul>

Hazard	Barriers	Hazardous Events	Controls
Water-borne hazards	<ul style="list-style-type: none"> <li>• Avoid areas that are known to be polluted.</li> <li>• Minimise crew contact with polluted water</li> <li>• Wash open wounds, cuts and blisters properly on return to land and seek medical attention</li> </ul>	Pollution (e.g. animal waste)	<ul style="list-style-type: none"> <li>• Seek medical attention</li> </ul>
	<ul style="list-style-type: none"> <li>• Avoid areas where this is expected to be present.</li> <li>• Minimise crew contact with water containing Blue Green Algae</li> </ul>	Blue Green Algae (see <a href="#">Safety Alert - Blue Green Algae</a> )	<ul style="list-style-type: none"> <li>• Seek medical attention</li> </ul>
	<ul style="list-style-type: none"> <li>• Avoid areas where this is expected to be present.</li> <li>• Cover cuts and abrasions with waterproof dressings</li> <li>• Wash open wounds, cuts and blisters properly on return to land and seek medical attention</li> <li>• Wash thoroughly after outings</li> </ul>	Weil's disease (Leptospirosis)	<ul style="list-style-type: none"> <li>• Seek medical attention</li> <li>• Coach rowers to understand the symptoms and seek immediate medical treatment.</li> </ul>
Very cold water	<ul style="list-style-type: none"> <li>• Find an alternative activity ashore.</li> <li>• Use larger boats (4x rather than 1x)</li> <li>• Use more stable boats</li> <li>• Fit stabilisers (adaptive rowing floats) to boats</li> <li>• Have mixed crews (Mix Juniors/ inexperienced rowers with more experienced rowers)</li> <li>• Coach good technique</li> <li>• Avoid holding crews in unstable positions</li> <li>• Keep rowers close to the clubhouse or close to the rescue boat.</li> </ul>	Capsize resulting in hypothermia (see <a href="#">Cold Water and Hypothermia online course</a> and <a href="#">Safety Alert - Cold Water Kills</a> )	<ul style="list-style-type: none"> <li>• Rescue with launch</li> <li>• Teach capsize drill and buddy rescue technique</li> <li>• Use Lifejacket or buoyancy aid</li> <li>• Provide first aid treatments for hypothermia</li> <li>• Move into warmer area and warm gradually</li> <li>• Provide warm (not hot) drink</li> <li>• Seek medical treatment if severe or if in doubt</li> </ul>

Hazard	Barriers	Hazardous Events	Controls
Tides	<ul style="list-style-type: none"> <li>• Check tide times before going afloat</li> <li>• Avoid having to return against a fast-flowing tide</li> </ul>	Unable to make way against the tide	<ul style="list-style-type: none"> <li>• Hold position with anchor</li> <li>• Carry tow line</li> <li>• Rescue with motor boat</li> </ul>
	<ul style="list-style-type: none"> <li>• Check tide times before going afloat</li> <li>• Avoid having to return against a fast-flowing tide</li> <li>• Have a plan for leaving the boat in a secure place</li> </ul>	Unable to return because tide has gone out	<ul style="list-style-type: none"> <li>• Land boat and secure in another place, crew walk back</li> <li>• Moor boat and recover crew with safety boat</li> </ul>
	<ul style="list-style-type: none"> <li>• Check tide times before going afloat</li> <li>• Avoid having to return against a fast-flowing tide</li> </ul>	Being swept out to sea or past harbour entrance	<ul style="list-style-type: none"> <li>• Hold position with anchor</li> <li>• Carry tow line</li> <li>• Rescue with motor boat</li> </ul>

## Further Information

- Safety Alert - Blue-Green Algae, <https://www.britishrowing.org/wp-content/uploads/2015/09/Safety-Alert-blue-green-algae.pdf>

## 9.4 Other Water Users

Rowing activities are affected by other water users such as motor boat users, sailing clubs, canoe clubs and water-skiers. It is important to know who else uses the local water, what activities they undertake and the hazards that these may present. These considerations should be incorporated into the Risk Assessment.

### Expectations

#### Everyone

Everyone is expected to:

- Know who uses the local water and the hazards their activities may present, for example anglers on the bank, large or fast boats creating wash.
- Know and understand the [sound signals](#) and [lights](#) used by other vessels.
- Be aware of local navigational rules and guidelines put in place to allow different activities to take place safely.
- Respect the needs of other water users.

#### Club

Club Officers are expected to:

- Set out rules and guidelines for outings covering:
  - Local navigation rules.
  - [Shared use of the water](#) with other water users.
- Provide information to members as appropriate.
- Implement a process to inform members what other activities are taking place.
- Set up a communication network with the local navigation authority and other water users and communicate relevant information to members.
- Agree restrictions on boating activities with other water users.
- Ensure that rules and guidelines are observed.
- Suspend or curtail boating activities where the conditions are assessed as unsafe.

#### Coaches

Coaches are expected to:

- Know about the activities of other water user and take account of the risks when planning outings.

- Know and understand the [sound signals](#) and [lights](#) used by other vessels.
- Ensure that the whole crew is aware of, and understands, the rules and guidelines for the activity being undertaken and the activities of other water users.

## Event

Event Officers and Organising Committees are expected to:

- Coordinate the event's activities with organisations representing other water users.
- Establish a process to inform participants of the activities of other water users and any activities that are currently restricted.
- Provide information to competitors covering local navigation rules.
- Ensure that rules and guidelines are observed.
- Suspend or curtail the event if conditions are assessed as unsafe.

## Regional Rowing Councils

Regional Rowing Councils are expected to:

- Facilitate contact between local clubs and navigation authorities in relation to the shared use of local water.
- Review incidents in the region.
- Provide advice to clubs and events on safety.

## British Rowing

British Rowing:

- Provides guidance to clubs through RowSafe.
- Provides an [Incident Reporting System](#).
- Provides [Safety Alerts](#) and other safety communications.
- Provides safety training material on its website.
- Provides courses that include safety.

## Further Information

- British Rowing Incident Reporting System - [incidentreporting.britishrowing.org](https://incidentreporting.britishrowing.org)
- Safety Alert Archive - [britishrowing.org/knowledge/safety/safety-alert-archive](https://britishrowing.org/knowledge/safety/safety-alert-archive)
- Canal and River Trust Boaters Handbook - [canalrivertrust.org.uk/enjoy-the-waterways/boating/navigating-the-waterways-boating/boaters-handbook](https://canalrivertrust.org.uk/enjoy-the-waterways/boating/navigating-the-waterways-boating/boaters-handbook)
- Rowing on the Tideway - [pla.co.uk/assets/THE\\_ROWING\\_CODE.pdf](https://pla.co.uk/assets/THE_ROWING_CODE.pdf)
- Joint guidance for rowers and canoeists on shared water - <https://www.britishrowing.org/wp-content/uploads/2017/03/Guidance-for-Rowers-and-Canoeists-on-shared-water.pdf?41e6e6>

## Example Risk Management Plan

### Hazards associated with other water users

Hazard	Barriers	Hazardous Events	Controls
Wash from large or fast boats	<ul style="list-style-type: none"> <li>Avoid areas where wash is expected</li> <li>Use larger boats (4x rather than 1x) or more stable boats if wash is expected</li> <li>Agreements with other water users to allocate different areas for different activities</li> <li>Coach crews in how to handle wash.</li> </ul>	Capsize	<ul style="list-style-type: none"> <li>Rescue with launch</li> <li>Teach capsize drill and buddy rescue technique</li> <li>Use Lifejacket or buoyancy aid</li> </ul>
	<ul style="list-style-type: none"> <li>Avoid areas where wash is expected</li> <li>Agreements with other water users to allocate different areas for different activities</li> <li>Coach crews in how to handle wash.</li> </ul>	Man overboard from gig	<ul style="list-style-type: none"> <li>Rescue with gig</li> <li>Rescue with launch</li> <li>Teach man overboard drill</li> <li>Use lifejacket or buoyancy aid</li> <li>Carry life ring and throw line</li> </ul>
	<ul style="list-style-type: none"> <li>Avoid areas where wash is expected</li> <li>Use larger boats (4x rather than 1x) or more stable boats if wash is expected</li> <li>Agreements with other water users to allocate different areas for different activities</li> <li>Coach crews in how to handle wash. Use a bailer to prevent water accumulation</li> </ul>	Swamping	<ul style="list-style-type: none"> <li>Have safety boat and throw lines available to rescue rowers and recover boat</li> <li>Use throw lines from the bank to pull the boat into the bank (or shallow water)</li> <li>Row or tow boat to shore then carry or tow empty boat to boathouse or relaunch and row back</li> <li>Adequate boat buoyancy</li> </ul>

Hazard	Barriers	Hazardous Events	Controls
Anglers on the bank or in boats	<ul style="list-style-type: none"> <li>Avoid areas where angling is expected</li> <li>Agreements with angling clubs, etc. different areas or times for different activities</li> <li>Coach crews to be aware of and avoid the hazard</li> </ul>	Entanglement with fishing lines and contact with hooks	<ul style="list-style-type: none"> <li>Rescue with launch</li> <li>Cut Fishing lines</li> <li>First aid treatment</li> </ul>
Vandals on the bank or bridges	<ul style="list-style-type: none"> <li>Avoid areas where this can be expected</li> <li>Notify the Police to prevent further occurrences</li> </ul>	Stone throwing from vandals on the bank or bridges	<ul style="list-style-type: none"> <li>First aid treatment</li> <li>Mark and quarantine damaged equipment until it is repaired</li> </ul>
Incompetent or ignorant motor boat users	<ul style="list-style-type: none"> <li>Avoid areas where this can be expected</li> <li>Note the identity of the boat and notify the Navigation Authority to prevent further occurrences</li> </ul>	Collision or swamping	<ul style="list-style-type: none"> <li>Have safety boat and throw lines available to rescue rowers and recover boat</li> <li>Teach capsized drill and buddy rescue technique</li> <li>Use throw lines from the bank to pull the boat into the bank (or shallow water)</li> <li>Row or tow boat to shore then carry or tow empty boat to boathouse or relaunch and row back</li> <li>Adequate boat buoyancy</li> </ul>

Hazard	Barriers	Hazardous Events	Controls
Commercial shipping such as cargo vessels, ferries, naval ships	<ul style="list-style-type: none"> <li>• Avoid shipping channels and other areas where large vessels operate.</li> <li>• Check the VTS (Vessel Traffic Service) radio channels for shipping movements and plan outing accordingly.</li> <li>• Be prepared to take action to avoid collision.</li> </ul>	Collision or swamping due to wash	<ul style="list-style-type: none"> <li>• Have safety boat and throw lines available to rescue rowers and recover boat</li> <li>• Row or tow boat to shore then carry or tow empty boat to boathouse or relaunch and row back</li> <li>• Carry tow rope for towing boat to safety</li> </ul>
		Swamping or capsize of a Gig (traditional wooden gigs have very little inherent buoyancy)	<ul style="list-style-type: none"> <li>• Operate a buddy systems and rescue with another gig.</li> <li>• Rescue with a safety boat</li> <li>• If necessary, call the coastguard and request lifeboat support.</li> <li>• Fit boats with buoyancy bags to provide extra buoyancy and stay with the boat until rescued.</li> <li>• Tow the boat back to the shore.</li> </ul>



## 9.5 Going Afloat and Landing

The hazards associated with going afloat and landing, both on land and on water, should be incorporated into the Risk Assessment.

### Expectations

#### Everyone

Everyone is expected to:

- Understand the local hazards associated with going afloat and landing.
- Take care when handling boats.
- Understand the Circulation Plan for launching and recovery.
- Follow the local procedures and instructions from the cox or coach.
- Wear the correct footwear.
- Take care when handling boats.

#### Club

Club Officers are expected to:

- Define the procedures for going afloat and landing and communicate to members.
- Define the Circulation Plan for launching and recovery.
- Ensure that there are procedures for quarantining damaged boats and equipment.
- Maintain launching areas in a safe condition.

#### Coaches

Coaches are expected to:

- Coach rowers in the correct procedure for going afloat and landing.
- Coach rowers to take care when handling boats.
- Coach rowers in the Circulation Plan for launching and recovery.
- Ensure that damaged equipment is quarantined.

#### Event

Event Officers and Organising Committees are expected to:

- Include the hazards in the boat launch and recovery area in their Risk Assessments.
- Define the procedures for going afloat and landing and communicate to participating clubs.
- Define the Circulation Plan for launching and recovery.
- Maintain launching areas in a safe condition.

## Regional Rowing Councils

Regional Rowing Councils are expected to:

- Review incidents in the region.
- Provide advice to clubs and events on safety.

## British Rowing

British Rowing:

- Provides guidance to clubs through RowSafe.
- Provides an [Incident Reporting System](#).
- Provides [Safety Alerts](#) and other safety communications.
- Provides safety training material on its website.
- Provides courses that include safety.

## Further Information

- British Rowing Incident Reporting System - [incidentreporting.britishrowing.org](http://incidentreporting.britishrowing.org)
- Safety Alert Archive - [britishrowing.org/knowledge/safety/safety-alert-archive](http://britishrowing.org/knowledge/safety/safety-alert-archive)

## Example Risk Management Plan

### Hazards associated with going afloat and landing

Hazard	Barriers	Hazardous Events	Controls
Steep banks in launch/recovery area	<ul style="list-style-type: none"><li>• Careful coaching</li><li>• Good control by coach or cox</li><li>• Correct footwear</li><li>• Well defined procedure</li><li>• Extra people (helpers)</li></ul>	Slipping and falling when lifting or carrying boat	<ul style="list-style-type: none"><li>• First aid treatment</li></ul>
Steep or irregular steps in launch/recovery area	<ul style="list-style-type: none"><li>• As above</li></ul>	Slipping or tripping and falling when lifting or carrying boat	<ul style="list-style-type: none"><li>• First aid treatment</li></ul>

<b>Hazard</b>	<b>Barriers</b>	<b>Hazardous Events</b>	<b>Controls</b>
Steep banks in launch/recovery area	<ul style="list-style-type: none"> <li>Careful coaching</li> <li>Good control by coach or cox</li> <li>Correct footwear</li> <li>Well defined procedure</li> <li>Extra people (helpers)</li> </ul>	Slipping and falling when lifting or carrying boat	<ul style="list-style-type: none"> <li>First aid treatment</li> </ul>
Steep banks in launch/recovery area	<ul style="list-style-type: none"> <li>As above</li> </ul>	Slipping or tripping and falling when lifting or carrying boat	<ul style="list-style-type: none"> <li>First aid treatment</li> </ul>
Slippery or muddy ground in launch/recovery area	<ul style="list-style-type: none"> <li>As above</li> </ul>	Slipping and falling when lifting or carrying boat	<ul style="list-style-type: none"> <li>First aid treatment</li> </ul>
Slippery surface on slipways	<ul style="list-style-type: none"> <li>As above</li> <li>Clean slipway surface</li> <li>Take care not to trap hands or feet</li> </ul>	Slipping, falling or trapping hands and feet when lifting or carrying boat	<ul style="list-style-type: none"> <li>First aid treatment</li> </ul>
Boat rolling down slipway out of control	<ul style="list-style-type: none"> <li>Careful coaching</li> <li>Good control by coach or cox</li> <li>Well defined procedure</li> <li>Extra people (helpers)</li> <li>Have means to control descent of boat (winch, rope etc.)</li> <li>Well maintained equipment (e.g. brakes on trailers).</li> </ul>	Collision with wall Boat falls off slipway Impact with people People are trapped against wall or under boat	<ul style="list-style-type: none"> <li>First aid treatment</li> <li>Additional medical treatment</li> <li>Mark and quarantine damaged equipment until it is repaired</li> </ul>
Manual handling of boats	<ul style="list-style-type: none"> <li>Define and implement a safe procedure for boat handling, launch and recovery.</li> <li>Use correct posture when lifting</li> <li>Additional people to move boats onshore and launch and recover</li> </ul>	Musculo-skeletal disorder due to manual handling	<ul style="list-style-type: none"> <li>First aid treatment</li> <li>Additional medical treatment</li> <li>Mark and quarantine damaged equipment until it is repaired</li> </ul>

Hazard	Barriers	Hazardous Events	Controls
Strong and variable currents during boat launching	<ul style="list-style-type: none"> <li>• Assistance from other crews or helpers</li> <li>• Find a more suitable location</li> </ul>	Injuries and damage due to inability to control a boat in the launch area	<ul style="list-style-type: none"> <li>• First aid treatment</li> <li>• Mark and quarantine damaged equipment until it is repaired</li> </ul>
Strong and variable currents during boat recovery	<ul style="list-style-type: none"> <li>• Plan approach (into stream) and include in circulation plan</li> <li>• Use throw lines from land</li> <li>• Find a more suitable location</li> </ul>	Injuries and damage due to inability to control a boat in the recovery area	<ul style="list-style-type: none"> <li>• First aid treatment</li> <li>• Mark and quarantine damaged equipment until it is repaired</li> </ul>

## 9.6 In and Around the Boathouse

The hazards in and around the boathouse, including the handling and storage of equipment, should be incorporated into the Risk Assessment.

### Expectations

#### Everyone

Everyone is expected to:

- Keep the boathouse and the surrounding area tidy.
- Use the correct technique when lifting equipment.
- Follow the instructions of the cox or coach.

#### Club

Club Officers are expected to:

- Ensure that appropriate and adequate storage is available for equipment.
- Define a procedure for quarantining equipment.
- Encourage members to keep the boathouse and the surrounding area tidy.
- Ensure that the hazards in and around the boathouse are included in their Risk Assessment, take care to include:
  - Hazards associated with the movement of boats both inside and outside.
  - Hazards associated with the movement of people both inside and outside.
  - Hazards associated with the storage of boats.
  - Hazards associated with other work conducted in or around the boathouse such as boat repair, painting, trailer loading and unloading (include chemical, electrical hazards, and fire).
  - Other people in the vicinity of the boathouse.



**Include any hazards in and around the boathouse in the Risk Assessment**

## Coaches

Coaches are expected to:

- Coach rowers to keep the boathouse tidy.
- Coach rowers to use the correct technique when lifting equipment.

## Event

Event Officers and Organising Committees are expected to:

- Include the hazards in and around the boat storage area in their Risk Assessments.
- Communicate appropriate advice to participants or participating clubs.

## Regional Rowing Councils

Regional Rowing Councils are expected to:

- Review incidents in the region.
- Provide advice to clubs and events on safety.

## British Rowing

British Rowing:

- Provides guidance to clubs through RowSafe.
- Provides an [Incident Reporting System](#).
- Provides [Safety Alerts](#) and other safety communications.
- Provides safety training material on its website.
- Provides courses that include safety.

## Further Information

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- Safety Alert Archive - [britishrowing.org/knowledge/safety/safety-alert-archive](https://britishrowing.org/knowledge/safety/safety-alert-archive)

## Example Risk Management Plan

### Hazards in and around the boathouse (including handling boats on land)

Hazard	Barriers	Hazardous Events	Controls
Solid fixed objects (riggers, boats, racking, etc.)	<ul style="list-style-type: none"> <li>Clear indication of what should go where (housekeeping)</li> <li>Coaching people to take care in the boathouse</li> <li>Good control and instruction (coxing)</li> </ul>	Collision of person with fixed object (e.g. walking into rigger)	<ul style="list-style-type: none"> <li>Have first aid kit available</li> <li>Have trained first aiders available</li> </ul>
	<ul style="list-style-type: none"> <li>Keeping floor clear</li> </ul>	Tripping over object on floor	<ul style="list-style-type: none"> <li>Have first aid kit available</li> <li>Have trained first aiders available</li> </ul>
Boats, oars, etc. falling from racks	<ul style="list-style-type: none"> <li>Good control and instruction (coxing)</li> <li>Fixing objects so that they cannot fall</li> </ul>	<p>Person struck by falling object</p> <p>Damage to falling object or something else as it falls or lands</p>	<ul style="list-style-type: none"> <li>Have first aid kit available</li> <li>Have trained first aiders available</li> <li>Mark and quarantine damaged equipment until it is repaired</li> <li>Record in damage log</li> <li>Repair equipment</li> </ul>
Lifting and carrying boats, oars, etc.	<ul style="list-style-type: none"> <li>Coach good lifting technique</li> <li>Assistance from additional people</li> <li>Good control and instruction (coxing)</li> </ul>	Strains and Musculo-Skeletal Disorders	<ul style="list-style-type: none"> <li>First aid</li> <li>Rest</li> <li>Gentle exercise</li> <li>Physiotherapy</li> </ul>
	<ul style="list-style-type: none"> <li>Good control and instruction (coxing)</li> <li>Keep a good lookout (coach/cox)</li> <li>Good technique (oars)</li> </ul>	Person struck by object being carried	<ul style="list-style-type: none"> <li>First aid treatment</li> </ul>

## 9.7 Faulty, Incorrectly Set and Poorly Maintained Equipment

It is important to understand that faulty, incorrectly set and poorly maintained equipment can put rowers and others at risk. Care should be taken to ensure that the risks associated with these issues are incorporated into the Risk Assessment.

### Expectations

#### Everyone

Everyone is expected to:

- Understand how to adjust equipment for their own use.
- Check equipment before going afloat.
- Know how to quarantine defective equipment.
- Not use defective equipment.

#### Club

Club Officers are expected to:

- Define a procedure for quarantining equipment.
- Ensure that equipment is maintained in good working order.

#### Coaches

Coaches are expected to:

- Coach rowers in adjusting equipment for their own use.
- Coach rowers to check equipment before going afloat.
- Coach rowers to know how to quarantine defective equipment.
- Not allow rowers to use defective equipment.

#### Event

Event Officers and Organising Committees are expected to:

- Define how they intend to check equipment used at the event.
- Communicate this decision to participants or participating clubs.
- Report any failed boat checks to their region.



## Regional Rowing Councils

Regional Rowing Councils are expected to:

- Review incidents in the region.
- Provide advice to clubs and events on safety.

## British Rowing

British Rowing:

- Provides guidance to clubs through RowSafe.
- Provides an [Incident Reporting System](#).
- Provides [Safety Alerts](#) and other safety communications.
- Provides safety training material on its website.
- Provides courses that include safety.

## Further Information

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- Safety Alert Archive - [britishrowing.org/knowledge/safety/safety-alert-archive](http://britishrowing.org/knowledge/safety/safety-alert-archive)

## Example Risk Management Plan

### Hazards associated with incorrectly set and poorly maintained equipment

Hazard	Barriers	Hazardous Events	Controls
Incorrect stretcher placement	<ul style="list-style-type: none"><li>• Check adjustments</li><li>• Coach rowers to check</li></ul>	Capsize due to hands going past chest	<ul style="list-style-type: none"><li>• Rescue with launch</li><li>• Teach capsize drill and buddy rescue technique</li><li>• Use Lifejacket or buoyancy aid</li></ul>
	<ul style="list-style-type: none"><li>• Check adjustments</li><li>• Coach rowers to check</li></ul>	Musculo-Skeletal Disorders and strains	<ul style="list-style-type: none"><li>• First aid</li><li>• Rest</li><li>• Gentle exercise</li><li>• Physiotherapy</li></ul>
Incorrect gearing	<ul style="list-style-type: none"><li>• Check adjustments</li><li>• Coach rowers to check</li></ul>	Musculo-Skeletal Disorders and strains	<ul style="list-style-type: none"><li>• First aid</li><li>• Rest</li><li>• Gentle exercise</li><li>• Physiotherapy</li></ul>

<b>Hazard</b>	<b>Barriers</b>	<b>Hazardous Events</b>	<b>Controls</b>
Gate not fastened	<ul style="list-style-type: none"> <li>• Check equipment before going afloat</li> <li>• Coach rowers to check equipment</li> </ul>	Capsize due to lost oar	<ul style="list-style-type: none"> <li>• Rescue with safety boat or attempt rescue with another rowing boat.</li> </ul>
Steering	<ul style="list-style-type: none"> <li>• Check adjustments</li> <li>• Coach rowers to check</li> </ul>	Inability to steer correctly	<ul style="list-style-type: none"> <li>• Have safety boat and throw lines available to rescue rowers and recover boat</li> <li>• Use throw lines from the bank to pull the boat into the bank (or shallow water)</li> </ul>
Heel restraints broken or too loose, shoes not securely fixed to the stretcher	<ul style="list-style-type: none"> <li>• Check equipment before going afloat</li> <li>• Coach rowers to check equipment</li> <li>• Do not go afloat until fixed</li> </ul>	May be trapped in capsized boat by feet caught in shoes	<ul style="list-style-type: none"> <li>• Rescue with safety boat or attempt rescue with another rowing boat.</li> </ul>
Seats, shoes or footplates loose or broken	<ul style="list-style-type: none"> <li>• Check equipment before going afloat</li> <li>• Coach rowers to check equipment</li> <li>• Defect/maintenance log</li> <li>• Mark and quarantine faulty equipment</li> </ul>	May struggle to get back to boathouse against stream or wind	<ul style="list-style-type: none"> <li>• Have safety boat and throw lines available to rescue rowers and recover boat</li> <li>• Use throw lines from the bank to pull the boat into the bank (or shallow water)</li> <li>• Carry an anchor</li> <li>• Carry extra clothing, drinking water, radio to call for assistance, etc.</li> </ul>
Steering failure	<ul style="list-style-type: none"> <li>• Check equipment before going afloat</li> <li>• Coach rowers to check equipment</li> <li>• Defect/maintenance log</li> <li>• Mark and quarantine faulty equipment</li> </ul>	May struggle to get back to boathouse against stream or wind	<ul style="list-style-type: none"> <li>• Have safety boat and throw lines available to rescue rowers and recover boat</li> <li>• Use throw lines from the bank to pull the boat into the bank (or shallow water)</li> <li>• Carry an anchor</li> <li>• Carry extra clothing, drinking water, radio to call for assistance, etc.</li> </ul>

Hazard	Barriers	Hazardous Events	Controls
Steering failure (continued)	<ul style="list-style-type: none"> <li>• Check equipment before going afloat</li> <li>• Coach rowers to check</li> <li>• Defect/maintenance log</li> <li>• Mark and quarantine faulty equipment</li> <li>• Coach coxes and rowers to steer by pressure</li> </ul>	Collision with bank, another boat or a solid object	<ul style="list-style-type: none"> <li>• Have safety boat and throw lines available to rescue rowers and recover boat</li> <li>• Use throw lines from the bank to pull the boat into the bank (or shallow water)</li> <li>• Carry first aid kit and radio or mobile phone to contact emergency services</li> <li>• Have trained first aiders available</li> </ul>
Hatch covers missing	<ul style="list-style-type: none"> <li>• Ensure covers are all fitted correctly</li> </ul>	Boat may sink if swamped	<ul style="list-style-type: none"> <li>• Have safety boat and throw lines available to rescue rowers and recover boat</li> <li>• Use throw lines from the bank to pull the boat into the bank (or shallow water)</li> <li>• Row or tow boat to shore then carry or tow empty boat to boathouse or relaunch and row back</li> <li>• Adequate boat buoyancy</li> </ul>

## 9.8 Pre-existing Health Conditions and Low Levels of Fitness

These considerations should be incorporated into the Risk Assessment.

### Expectations

#### Everyone

Everyone is expected to:

- Discuss any health and fitness concerns with the coach or club.
- Refrain from rowing if they are unwell or not sufficiently fit.
- Refrain from training if they feel unwell or if to do so would be unsafe.

#### Club

Club Officers are expected to:

- Include rower health and fitness in their Risk Assessment.
- Support rowers who feel that they are unfit or unwell.
- Ensure that no pressure is put on rowers who are unfit or unwell.

#### Coaches

Coaches are expected to:

- Check that rowers are sufficiently fit and well for the planned activity.
- Support rowers who feel that they are unfit or unwell.
- Ensure that no pressure is put on rowers who are unfit or unwell.

#### Regional Rowing Councils

Regional Rowing Councils are expected to:

- Review incidents in the region.
- Provide advice to clubs and events on safety.

## British Rowing

British Rowing:

- Provides guidance to clubs through RowSafe.
- Provides an [Incident Reporting System](#).
- Provides [Safety Alerts](#) and other safety communications.
- Provides safety training material on its website.
- Provides courses that include safety.

## Further Information

- British Rowing Incident Reporting System - [incidentreporting.britishrowing.org](http://incidentreporting.britishrowing.org)
- Safety Alert Archive - [britishrowing.org/knowledge/safety/safety-alert-archive](http://britishrowing.org/knowledge/safety/safety-alert-archive)
- [RowSafe 6.1](#) - People new to rowing
- [RowSafe 8.6](#) - Coping with Illness and Diseases
- [RowSafe 8.6.1](#) - Common Illness and Diseases
- [RowSafe 8.6.2](#) - Chronic Conditions and Diseases
- [RowSafe 8.6.3](#) - Asthma

## Example Risk Management Plan

### Hazards associated with pre-existing health conditions or low level of fitness

Hazard	Barriers	Hazardous Events	Controls
Rowers with low level of fitness	<ul style="list-style-type: none"><li>• Understand fitness capabilities and work within them</li><li>• Improve fitness levels</li></ul>	Collapse or illness	<ul style="list-style-type: none"><li>• First aid treatment</li><li>• Seek Medical attention</li><li>• If necessary, request assistance from ambulance, coastguard or navigation authority</li></ul>
Pre-existing health conditions (See <a href="#">RowSafe 8.6</a> )	<ul style="list-style-type: none"><li>• Ensure that relevant people know of the condition so that appropriate action can be taken to prevent an incident.</li></ul>	Medical incident afloat or on land	<ul style="list-style-type: none"><li>• First aid treatment</li><li>• Seek Medical attention</li><li>• If necessary, request assistance from ambulance, coastguard or navigation authority</li></ul>

Hazard	Barriers	Hazardous Events	Controls
Crew member or sculler with asthma (See RowSafe 8.6.3)	<ul style="list-style-type: none"> <li>Ensure that an inhaler is carried and used when appropriate</li> <li>Avoid stressful situations</li> <li>Take extra care if person is in a 1x or 2x</li> </ul>	Asthmatic incident afloat	<ul style="list-style-type: none"> <li>Bring Casualty ashore</li> <li>First aid treatment</li> <li>Seek Medical attention</li> <li>If necessary, request assistance from coastguard or navigation authority</li> </ul>
	<ul style="list-style-type: none"> <li>Ensure that an inhaler is carried and used when appropriate</li> <li>Avoid stressful situations</li> </ul>	Asthmatic incident on land	<ul style="list-style-type: none"> <li>First aid treatment</li> <li>Seek Medical attention</li> <li>If necessary, request an ambulance</li> </ul>
Crew member or sculler with diabetes (See RowSafe 8.6.2)	<ul style="list-style-type: none"> <li>Ensure that appropriate food and medicines (if necessary) are available</li> <li>Take extra care if person is in a 1x or 2x</li> </ul>	Diabetic incident afloat	<ul style="list-style-type: none"> <li>Bring Casualty ashore</li> <li>First aid treatment</li> <li>Seek Medical attention</li> <li>If necessary, request assistance from coastguard or navigation authority</li> </ul>
	<ul style="list-style-type: none"> <li>Ensure that appropriate food and medicines (if necessary) are carried</li> </ul>	Diabetic incident on land	<ul style="list-style-type: none"> <li>First aid treatment</li> <li>Seek Medical attention</li> <li>If necessary, request an ambulance</li> </ul>
Crew member or sculler other known disorder (See RowSafe 8.6)	<ul style="list-style-type: none"> <li>Carry appropriate items</li> </ul>	Incident afloat	<ul style="list-style-type: none"> <li>Bring Casualty ashore</li> <li>First aid treatment</li> <li>Seek Medical attention</li> <li>If necessary, request assistance from Coastguard or navigation authority</li> </ul>
	<ul style="list-style-type: none"> <li>Ensure that appropriate items are available</li> </ul>	Incident on land	<ul style="list-style-type: none"> <li>First aid treatment</li> <li>Seek Medical attention</li> <li>If necessary, request an ambulance</li> </ul>
Flu/viral infection	<ul style="list-style-type: none"> <li>Discourage rowers from taking exercise when they are ill.</li> </ul>	Disease may spread or worsen	<ul style="list-style-type: none"> <li>Seek Medical attention</li> </ul>

## 9.9 Ocean Rowing Risk Management Plan

There is general guidance on Ocean Rowing in [section 10.3](#) of RowSafe.

There are many hazards inherent in Ocean Rowing and this risk management plan deals with those associated with a person falling or being swept overboard and capsizing. It is understood that capsizes are not uncommon events. There is also a brief mention of collisions at sea.

The following guidance is general and should be used with care. For example, there is little advantage in having a throw line on a single seat boat and it may not be practicable to have more than one person on deck at all times on a small boat.

### Note 1: Guardrails

Guardrails are fitted on both sides to the deck to help ensure that the members of the crew do not fall overboard. They should consist of taut, strong, webbing securely fixed to the boat at both ends.

The top rail should be fitted as high as practicable and there should be a lower rail or rails, parallel with the top rail, to ensure that nobody falls overboard under the top rail. The rail should be positioned so as not to make it difficult for a person to be recovered back on board.

### Note 2: Harnesses, Lifelines, Jackstays

The purpose of the combination of Harnesses, Lifelines and Jackstays is to keep members of the crew connected to the boat in the event of them falling or being swept overboard.

The harness is usually in the form of a substantial belt rated for this application, this will be worn at all times by every member of the crew who is on deck or who is entering or leaving a cabin. If a lifejacket with crotch straps is being worn correctly then its integral harness may be a viable alternative as would a conventional yachting harness.

A lifeline is a line, normally made from strong webbing material with carabiners or similar fasteners at both ends. One end is attached to the harness and the other to a jackstay. It is important that both ends of the lifeline are correctly attached before a crew member leaves a cabin and until they have returned to the cabin. Elasticated lifelines may be preferred as they create less of a tripping hazard. Lifelines should be sufficiently long so that any person swept overboard as a boat capsizes is not held underwater by their lifeline.

Jackstays normally consist of strong webbing material and run along the deck on both sides of the boat. Their ends are securely fixed to the deck and the ends are positioned in such a way that they can easily be reached by a person in the cabin entrance.

## Note 3: Lifejackets

The purpose of Lifejackets is to keep people afloat if they enter the water.

Ideally they should be auto-inflation with hydrostatic actuators, and be equipped with a crotch strap and automatic light. They should have a buoyancy of no less than 150 Newtons.

They should be [fitted correctly](#) and [routinely checked](#).

## Note 4: Lights

Red head torches should be worn by each crew member when on deck at night. Their purpose is to help the crew member to see and be seen. Red lights are recommended because they tend to cause little degradation of night vision.

Boats should be equipped with navigation lights. These should be switched on if other vessels are in the vicinity, for example if they can be seen or detected by the AIS and in coastal waters. They may not need to be switched on in full daylight if visibility is good.

Some rowers may, at times, choose not to use navigation lights when well out to sea in order to give them better visibility of oncoming vessels, allow them to see sea conditions better and reduce sea sickness. Not using navigation lights at night exposes rower to the hazard of a collision and should only be contemplated after careful consideration and cannot be recommended.

## Note 5: Drogues, parachute anchors and towed lines

Drogues or parachute anchors are deployed to reduce the downwind drift of the boat and to hold it in a stable direction with respect to the following waves. This will reduce the probability of broaching and capsize.

Broaching occurs when a boat runs quickly down a wave front and turns parallel to the wave front in the trough. The boat is then broadside on to the next wave and at risk of being capsized.

The line used to connect the drogue or parachute anchor to the boat should be securely fixed to a strong-point on the stern of the boat. The length of line (distance between the drogue or parachute anchor) should be as long as practicable.

A towed line is used to provide a crew member who has fallen overboard with a last chance to be recovered into the boat. It should consist of a long floating line with a floating light at the end. It should be deployed whenever the downwind speed of the boat is such that it would be difficult to turn the boat and row upwind towards a casualty in the water.

## Further Information

- Safety Alert – Check your lifejacket, <https://www.britishrowing.org/wp-content/uploads/2015/09/Safety-Alert-check-your-lifejacket.pdf>
- Safety Alert - Lifejackets, <https://www.britishrowing.org/wp-content/uploads/2015/09/Safety-Alert-February-2015-Lifejackets.pdf>



## Example Risk Management Plan

Hazard	Barriers	Hazardous Events	Controls
Rogue wave in calm or moderate water ( <a href="#">see 10.3</a> )	<ul style="list-style-type: none"> <li>• Taut webbing running the length of both sides of the cockpit (<a href="#">see note 1</a>).</li> <li>• Keep decks clear, take care to avoid tripping hazards.</li> <li>• Take great care when moving about on deck, crawl rather than walk and hold on.</li> </ul>	Person falls or is swept overboard	<ul style="list-style-type: none"> <li>• Use of harness and lifeline clipped to a jackstay or other strongpoint (<a href="#">see note 2</a>).</li> <li>• Wear an auto-inflation lifejacket (<a href="#">see note 3</a>).</li> </ul>

Hazard	Barriers	Hazardous Events	Controls
Failure of (or failure to use) harness and/ or lifeline	<ul style="list-style-type: none"> <li>• Taut webbing running the length of both sides of the cockpit (<a href="#">see note 1</a>).</li> <li>• Check equipment prior to each use.</li> <li>• Keep decks clear, take care to avoid tripping hazards.</li> <li>• Take great care when moving about on deck, crawl rather than walk and hold on.</li> </ul>	Person falls overboard and remains stationary as the boat is swept away (boat not connected to casualty)	<p><u>Immediate recovery to the boat</u></p> <ul style="list-style-type: none"> <li>• Have at least two persons on deck</li> <li>• Use throw line or rescue quito to bring person back to the boat.</li> <li>• Tow a buoyant line astern with buoy and floating light at end (<a href="#">see note 5</a>).</li> <li>• Wear a red head torch at night (<a href="#">see note 4</a>).</li> <li>• Wear an auto-inflation lifejacket (<a href="#">see note 3</a>).</li> <li>• Deploy a sea anchor to reduce the downwind drift of the boat (<a href="#">see note 5</a>).</li> </ul> <p><u>Subsequent rescue if not recovered immediately</u></p> <ul style="list-style-type: none"> <li>• Every crew member carries a PLB.</li> <li>• Wear a red head torch at night (<a href="#">see note 4</a>).</li> <li>• Wear an auto-inflation lifejacket (<a href="#">see note 3</a>).</li> <li>• Deploy an auto inflation danbuoy with light.</li> <li>• Use Man Overboard (MoB) facility on GPS to fix position, transmit MAYDAY by VHF</li> <li>• Contact event organisers to initiate rescue.</li> </ul>
Rough water ( <a href="#">see 10.3</a> )	<ul style="list-style-type: none"> <li>• Use drogue to keep boat heading downwind (i.e. at 90 degrees to the waves) (<a href="#">see note 5</a>)</li> <li>• Ensure crew are safe in cabins with hatches closed to prevent water ingress. Ensure that vents are closed if the boat capsizes.</li> </ul>	Capsize causing people to be thrown overboard.	<ul style="list-style-type: none"> <li>• As above</li> <li>• Ensure that water ballast tanks or containers are kept full and any heavy items are securely stowed low in the boat to promote self-righting.</li> </ul>

Hazard	Barriers	Hazardous Events	Controls
Rough water (see 10.3)	<ul style="list-style-type: none"> <li>Ensure that decks are cleared and deck equipment is stowed below deck or lashed securely on deck.</li> </ul>	Capsize causing equipment to be lost overboard.	<ul style="list-style-type: none"> <li>As above</li> </ul>
Rough water (see 10.3)	<ul style="list-style-type: none"> <li>Ensure each crew member is wearing head protection</li> </ul>	Capsize causing head injuries to crew in cabin.	<ul style="list-style-type: none"> <li>Treat with first aid.</li> <li>Call race organisers if support or advice is needed</li> </ul>
Rough water (see 10.3)	<ul style="list-style-type: none"> <li>Ensure each crew member is wearing head protection.</li> <li>Ensure that moveable equipment, etc. is stowed securely.</li> <li>Ensure that fixed equipment is enclosed.</li> </ul>	Capsize causing injuries due to contact with equipment in a cabin.	<ul style="list-style-type: none"> <li>Treat with first aid.</li> <li>Call race organisers if support or advice is needed</li> </ul>
Other Shipping in the vicinity when crew is closed up in cabin	<ul style="list-style-type: none"> <li>Ensure that Navigation lights are switched on and AIS is transmitting (see note 4).</li> <li>Monitor AIS and use VHF to warn other shipping of your presence.</li> </ul>	Collision with, or being run down by, other shipping	<ul style="list-style-type: none"> <li>Use whatever equipment is available to call for help</li> </ul>
Other Shipping in the vicinity at night or visibility is less than “good”	<ul style="list-style-type: none"> <li>Ensure that Navigation lights are switched on and AIS is transmitting (see note 4).</li> </ul>	Collision with, or being run down by, other shipping	<ul style="list-style-type: none"> <li>Use whatever equipment is available to call for help</li> </ul>