

Adaptive Rowing Safety Guidance for Event Organisers

Fixed & Sliding Seat Boats

Authors: Louise Kingsley & Simon Goodey
07/05/2015

Updated: April 2017

Contents

Fixed Seat British Rowing Events	2
Para-Rowing categories:	2
Rowability categories:	2
Information required from rower prior to entering event:	2
Access arrangements.....	2
Health and safety emergency response.....	2
Changing and toilet facilities	3
Embarkation and return of adaptive boats	3
Embarkation: Transfer from wheelchair – pontoon – boat.....	3
Stabilising pontoons floats	4
Foot stretcher.....	4
Strapping (safety and compliance checks).....	4
Potential for capsize	4
In the event of a capsize	4
Cold water immersion (hypothermia)	5
Autonomic Dysreflexia	5
Safety boat & personnel.....	5
Radio communication.....	6
Sliding Seat British Rowing Events	7
Para-Rowing categories:	7
Rowability categories:	7
Information required from rower prior to entering event	7
Access arrangements.....	7
Health and safety emergency response.....	7
Equipment considerations	8
Strapping (safety and compliance checks).....	8
Potential for capsize	8
Appendix.....	9
Radio procedure.....	9

Fixed Seat British Rowing Events

This document highlights safety advice for the Organising Committees of British Rowing Para-Rowing and Rowability events.

All competitors will hold a valid British Rowing Classification or Rowability Grouping, which includes a pre-activity health screening.

Note: Lifejackets are not safe for use with rowers using strapping as they may hinder a rower releasing themselves from the boat.

Para-Rowing categories:

- **PR2** – Rowers who have trunk and arm movement, but are unable to use their legs to propel the boat, because of loss of lower limb function. Rowers use leg strapping.
- **PRI** – Rowers who row with their arms and shoulders only with minimal or no trunk function and require a degree of postural support using a fixed seat with backrest. They have trunk and leg strapping.

Adaptive Rowing categories:

- **AR2** – Rowers who have trunk and arm movement, but are unable to use their legs to propel the boat, because of loss of lower limb function. Rowers use leg strapping.
- **ARI** – Rowers who row with their arms and shoulders only with minimal or no trunk function and require a degree of postural support using a fixed seat with backrest. Rowers use trunk and leg strapping.

Para-Rowers and Rowability Rowers will be referred to as Adaptive Rowers.

Information required from rower prior to entering event:

- Confirmation of Classification.
- Declaration of relevant health conditions.
- Confirmation that the rower has evaluated the safety of equipment and where appropriate carried out a controlled capsized drill.

Access arrangements

- Complete an access audit to identify potential hazards. It should follow a logical, sequential journey following how members enter, navigate, use and leave the club; starting from the club perimeter, through car parking areas, pedestrian routes, building entrances, reception areas, information, delivery, horizontal and vertical circulation routes to ensure that facilities are accessible for competitors, with adequate provision for wheelchair users.

Health and safety emergency response

- Use your Risk Assessment to help you to identify potential emergency situations both on the water and on land.
- Consider what rowers can and cannot do and use this information when defining any additional provisions, beyond those that you would otherwise need.
- Consult with relevant rowers and their coaches if you feel that this would help.
- Ensure that your Emergency Plan is communicated to all those involved in providing emergency assistance and that it is well understood.
- After the event, review your plan and identify any opportunities for improvement.

Changing and toilet facilities

Event organisers:

- Ensure that there are adequate, accessible toilets at the event.
- Ensure that there are adequate changing rooms/areas to accommodate wheelchair users.
- Ensure that facilities for the disposal of clinical and similar waste have wheelchair access.

Embarkation and return of adaptive boats

Pontoons and landing stages are preferred to launching off steps, slipways or the bank as it is easier to transfer from wheelchair to boat and back.

- Care should be taken to ensure that embarkation pontoons and rafts are stable for wheelchair users with access ramps at appropriate gradient for manual wheelchairs. A slope no greater than 1:12 is recommended.
- Care should be taken to remove sharp projections that may cut or mark during transfer.
- Depending on the number of entries it may be appropriate to define a dedicated boat launch and landing area for Adaptive rowers, as they may need more time and space for embarkation and return, particularly if they have to rely on support from their coaches or helpers, etc.

Embarkation: Transfer from wheelchair - pontoon - boat

Rowing is one of the most dynamic of all seated sports and individuals with spinal cord injuries in particular are susceptible to develop tissue pressure marking/sores. Many rowers will have their own preferred method of skin protection to use in and out of the boat.

Event organisers:

- Ensure that embarkation and return rafts/pontoons are adequately protected with no sharp projections and matting for rowers to transfer to and from a wheelchair.
- Ensure that embarkation pontoons/rafts are stable for wheelchair users with access ramps at appropriate gradient for manual wheelchairs. Assistance may need to be given.

Rowers:

- Ensure that when transferring to the boat, they avoid sitting on hard surfaces for prolonged periods of time. Care should be taken to avoid sharp projections that may cut or mark during transfer, e.g. riggers.
- Protect heels from pressure marking and ensure that they use transfer cushions during transfer to pontoon/raft.

Helpers / Marshals

- There should be a heightened awareness of helpers around the boating area.
- Marshals should remove wheelchairs and prosthesis from the boating area after rowers have embarked and store them in a safe and dry area.
- Untrained helpers and marshals should follow the rower's instructions and only provide the assistance that is requested.

Stabilising pontoons floats

The provision of stabilising pontoons for Adaptive Rowers provides a more stable platform, by providing additional lateral stability for rowing shells.

- The pontoons must be fixed in position so that when the rower is seated in the balanced boat, both pontoons are horizontal and, at a minimum, touch the water. **Marshals should be available to check that pontoon floats are used for PRI/ARI competitors.**
- The use of pontoon floats for PR2/AR2 competitors is optional.
- If rowers rely on pontoon floats to provide extra stability then it is important to ensure that these floats have adequate buoyancy and are attached correctly.

Foot stretcher

- PRI and ARI rowers should not have a foot stretcher that relies on heel-restraints as a method of release in the event of capsize, as they are likely to have little or no function in their lower extremities (recommend nylon heel-cups).
- Modifications to the foot stretcher to facilitate a prosthesis (artificial limb) should allow the rower to leave the boat in the event of a capsize, and should comply with British Rowing Safety Rules.

Strapping (safety and compliance checks)

- See British Rowing 2015 Rules of Racing:
 - 2-3-8 Equipment Check
 - Appendix C - General Strapping Requirements for Rowability and Para-Rowing events
- All strapping used by rowers should have no mechanical buckles and be released on the same side and in the same manner and direction.
- All hand strapping must be able to be released immediately in a quick and safe manner, preferably mouth action.
- All leg/trunk strapping must be single-point release.

Rowers:

- Demonstrate at embarkation point that they are able to release straps in a safe manner.

Potential for capsize

All Safety Teams at events should be aware that some adaptive rowers will have compromised sitting balance in the AS and RUS boat classes and therefore the risk of capsize is heightened.

Safety Teams:

- Carry out checks to ensure correct fixing of pontoon floats.

Rowers:

- Demonstrate safe release of straps before leaving embarkation pontoons.

In the event of a capsize

Rescue Teams:

- Be conversant with up-righting an inverted boat with rowers who are strapped into seats.
- Understand the method of release for rowing straps and carry a safety knife (and spare knife on a lanyard), so if necessary they can cut straps at the attachment point to seat frame.

Cold water immersion (hypothermia)

There is an increased risk for rowers who have thermoregulation dysfunction i.e. spinal cord injury. These rowers are unable to shiver to conserve heat at or below their injury level. Individuals can become poikilothermic (when the body assumes the temperature of its environment) in a very short period of time, and safe and expedient removal from the water is essential.

Event organisers:

- Try to schedule adaptive races at times to avoid prolonged waiting times at start/finish of racing.

Autonomic Dysreflexia

This is a sudden increase in blood pressure and corresponding decrease in heart rate. The condition occurs in rowers with complete spinal injuries at T6 and above. It can occur anywhere within the rowing environment, but is of heightened concern on water.

Rowers:

- Adaptive rowers predisposed to dysreflexic episodes should either carry relevant medication in a waterproof chest pocket or have declared the cause of such episodes during classification.
- Rowers, and their coaches, will be aware of symptoms and be able to use some form of signing to the Rescue boat.

Rescue boat

- If a rower suffers from Autonomic Dysreflexia, the emergency response is to raise the head above their knees (preferably in a sitting position). This position naturally reduces blood pressure. Look for the causes and seek medical help.

Safety boat & personnel

Safety /rescue boat:

- Appropriate rescue launch with low freeboard and/or drop-bow for safe rescue of adaptive rowers who are likely to have reduced mobility or muscle weakness in the lower extremities.
- Sufficiently stable to allow safe recovery of people from the water.
- Should have naturally buoyant properties ('tin fish' not appropriate).
- Low sides to make it easier getting people out of the water.
- Fitted with a propeller guard to protect people in the water.
- Quick and easy to manoeuvre with low wash characteristics.
- Enough space to carry injured persons lying down to a safety.
- Carry British Rowing safety equipment with the addition of a 'horseshoe life ring' and 'safety knife' and radio.
- Well maintained, with a recorded maintenance and service history.
- Positioned such that they stay close to the competitors and are strategically located along the event course with radio links.

Safety personnel:

- Enough capable crew to rescue a potentially uncooperative casualty.
- In addition to the driver, each rescue boat should have at least one crew member and together they should be able to rescue a rower who cannot release the straps.
- Event organisers should ensure that there are an adequate number of safety boats with recommended launch rescue kit.
- Each safety team should keep good communication using VHF radios on dedicated channel.

Radio communication

It is important that all Rescue and First Aid facilities can communicate so that efforts can be coordinated. This is best achieved with the use of VHF radios. Users should be competent to use them, this may require additional briefings. **(See “Radio Procedure” in the Appendix I.)**

Sliding Seat British Rowing Events

This document highlights safety advice for the Organising Committees of British Rowing Para-Rowing and Rowability events.

All competitors will hold a valid British Rowing Classification or Rowability Grouping which includes a pre-activity health screening.

Para-Rowing categories:

- **Leg-Trunk-Arms (Physical Disability) (LTA-PD)** – Rowers with a physical disability who are able to use a sliding seat with their legs, trunk and arms to perform the rowing stroke. Rowers may use hand strapping.
- **Leg-Trunk-Arms (Visual Impairment) (LTA-VI)** – Rowers with a visual impairment who are able to use a sliding seat with their legs, trunk and arms to perform the rowing stroke.

Rowability categories:

- **Rowability Sliding Seat (Physical Disability) (RSS-PD)** – Rowers with a physical disability who are able to use a sliding seat with their legs, trunk and arms to perform the rowing stroke. Rowers may use hand strapping.
- **Rowability Sliding Seat (Learning Disability) (RSS-LD)** – Rowers with a learning disability who are able to use a sliding seat with their legs, trunk and arms to perform the rowing stroke.

Para-Rowers and Rowability Rowers will be referred to as Adaptive Rowers

Information required from rower prior to entering event

- Confirmation of Classification or Rowability Grouping.
- Declaration of relevant health conditions.

Access arrangements

- Ensure that the approach route to embarkation pontoons is well lit and free of potential trip hazards, with steps clearly identified to VI rowers.

Health and safety emergency response

- Use your Risk Assessment to help you to identify potential emergency situations both on the water and on land.
- Consider what rowers can and cannot do and use this information when defining any additional provisions, beyond those that you would otherwise need.
- Consult with relevant rowers and their coaches if you feel that this would help.
- Ensure that your Emergency Plan is communicated to all those involved in providing emergency assistance and that it is well understood.
- After the event, review your plan and identify any opportunities for improvement.

Equipment considerations

- Modifications to the foot stretcher to facilitate a prosthesis (artificial limb) should comply with British Rowing 2015 Rules of Racing:
 - 2-3-8 Equipment Check

Rowers:

- Those with a limited range of movement in their ankles, or who wear a prosthesis, should ensure that if they have foot stretchers that rely on heel-restraints as a method of release. In the event of a capsize, then they are able to safely remove their feet from the boat.
- It is recommended that those with a learning disability use a coxed boat (preferably stern-coxed), so that the cox is able to communicate directly with the crew. Coxless boats would require a greater level of supervision and may not be considered safe if there are hazards on the event course such as weirs or sluices, and a crew need to take instruction from umpires and marshals.
- Consideration for those with a visual impairment should be given by event organisers to permit use of radio link to help with steering. Umpires/Control Commission should be made aware of rowers and their coaches using radio communication.

Strapping (safety and compliance checks)

LTA-PD/RSS-PD rowers are only likely to use hand strapping.

- See British Rowing 2015 Rules of Racing:
 - 2-3-8 Equipment Check
 - Appendix C - General Strapping Requirements for Rowability and Para-Rowing events
- All hand strapping must be able to be released immediately in a quick and safe manner, preferably by mouth action.

Potential for capsize

Safety Teams:

- LTA-VI rowers may become disorientated in the event of a capsize. Safety teams should be aware of boats that contain visually impaired rowers and their seat position.
- RSS-LD rowers may have an unpredictable response in the event of a capsize. Safety teams should be aware of boats that contain rowers with a learning disability and their seat position.

Appendix

Radio procedure

Effective use of the radios relies on keeping transmissions short and to the point, speaking clearly and following some basic internationally recognised procedures. Use Procedure Words (**pro-words**) and the International Phonetic Alphabet to make transmissions easier to understand, especially when reception is poor.

Making a call

Listen

Only one radio can transmit at a time; if you talk at the same time as someone else you will not be heard.

Make your call

To make your initial call, say their name and yours, e.g. *Control. **This is** Rescue I. **Over**.*

If you do not get an immediate reply, wait a short time and then call again saying the station names twice, e.g. *Control, Control, **this is** Rescue I, Rescue I. **Over**.*

When the other station has replied to you initial call, pass your messages. When you have finished saying something and want to hear the other station, say “**Over**”. At the end of the conversation, say “**Out**”.

For example:

Control, **this is Rescue I **Over**.**

*Rescue I, **this is** Control. **Over**.*

Control, **this is Rescue I. There has been a capsized near the bridge. I am proceeding to rescue. Please alert the Ambulance. **Over**.**

*Rescue I, **this is** Control. **Received**. We will alert the Ambulance. **Out**.*

Examples of some standard calls

Radio checks

At the start of the day, Control may carry out radio checks to ensure that everyone can hear and be heard. The procedure for this is:

Rescue I, **this is Control. **Radio Check, please. **Over****.**

*Control, **this is** Rescue I. I have you loud and clear. **Over**.*

Rescue I, **this is Control, I have you loud and clear also. **Out**.**

It is important that Rescue I knows that Control is receiving his transmissions.

Broadcasting to all stations

Sometimes you need to tell everyone something. To pass a message to everyone, call “All Stations”.

*All Stations, **this is** Control. Be aware that a large motor vessel is navigating in the centre of the course. Suspend all racing. Clear the course. **Repeat**. Suspend all racing. Clear the course. **Out**.*

This should be used when you need to communicate information to everyone and do not expect anyone to reply.

Distress calling

Where assistance is required and only if there is grave and imminent danger of loss of life then use the term “Mayday”. For example

Mayday Mayday Rescue 1. All Stations, this is Rescue 1. Just upstream of the bridge, an AS sculler has capsized and cannot be righted. We need assistance from another rescue boat. Over.

Mayday Rescue 1. Rescue 1, this is Rescue 2. We will be with you in 30 seconds. Out.

All further radio transmissions not directly associated with the rescue shall cease immediately and shall not resume until permission (“***Distress Fini***” (pronounced Distress Feenee)) is transmitted. All radio transmissions associated with the rescue should commence “***Mayday Rescue 1***”.