Wheelchair User Restraints on the Water

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Agenda

- Wheelchairs & entrapment hazards
- What is the best practice guidance?
- Considering the hazards and managing risks
- Examples of seating options
- Key considerations if using restraints
- Questions & discussion

Potential Entrapment Hazards

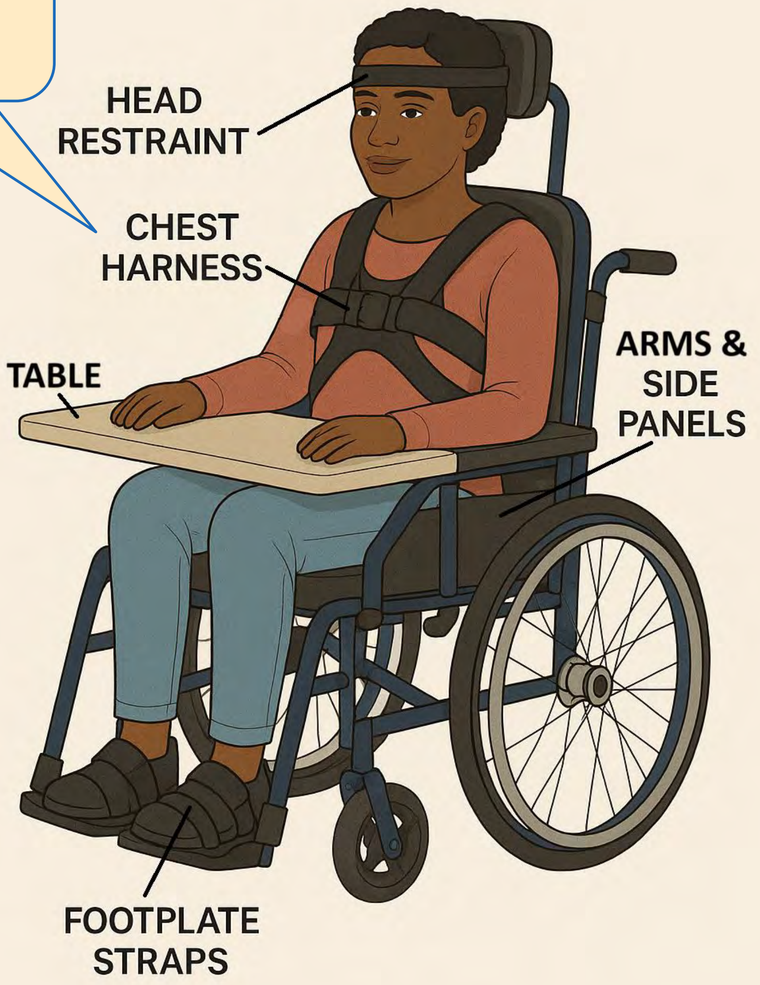
LOW-BACKED SPORTS WHEELCHAIR

Typically 6-14kg

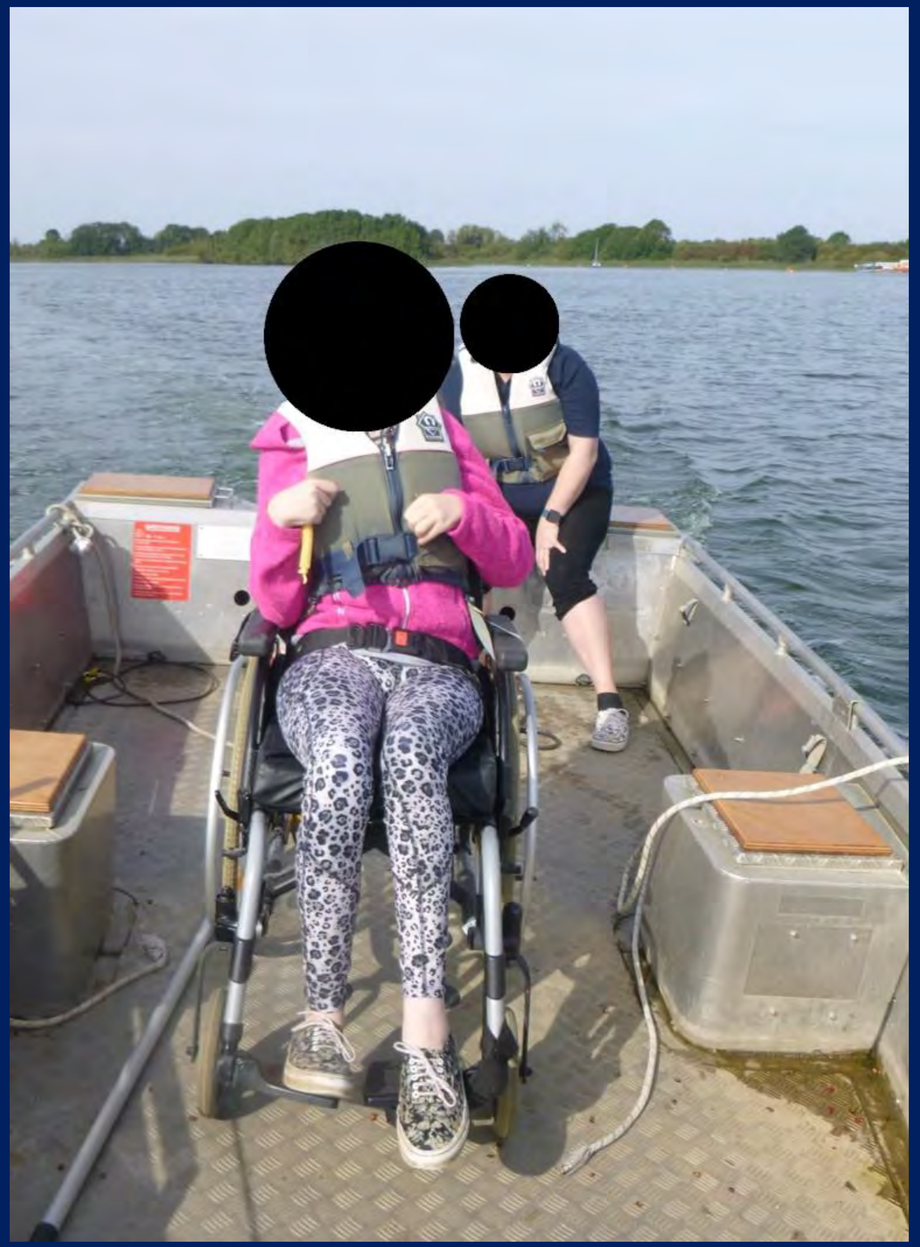
Typically 18–30kg

50N BA = 5kg Buoyancy

HIGH-BACKED MANUAL WHEELCHAIR



Potential Entrapment Hazards



What is the best practice guidance?

Royal Yachting Association (RYA)

Safety practice guidance - Sailability

Guidance around safety practice where disabled people and those with long term health conditions are taking part

https://www.rya.org.uk/club-centre-support/affiliates/managing-on-the-water-activities/on-water-individuals/safety-on-the-water---sailability

What is the best practice guidance?

Royal Yachting Association (RYA)

Key Points

1. Specific section on strapping and harnesses (i.e. restraints).
2. The RYA acknowledge some participants require restraints to maintain posture and improve control of sails and steering.
3. They clearly identify and highlight the hazard (both close to water and on boats) that the restraints increase the risk of drowning.
4. They go on to clearly identify the implications for practice.

What is the best practice guidance?

Royal Yachting Association (RYA)

Implications for practice and procedures

- A sailor using a wheelchair should not be strapped to their chair while on a pontoon, slipway or other location where there is a risk of the chair falling into the water.
- Any strapping or equipment designed for fixing sailors to boats to maintain posture or improve control of sails / steering, or for any other reason should be very carefully risk assessed and procedures put in place because of the increased risk of entrapment.
- If it is decided that a sailor should be secured to a vessel for any reason, the method of securing should be a quick release type and those responsible for safety should be familiar with the mechanism. Buckles that require positive release using two fingers are not appropriate. For example, many side release buckles require pressure on both sides to release.

What is the best practice guidance?

Paddle UK

Paddlesafer Safety Document

https://paddleuk.org.uk/safety-documents/

No specific guidance for supporting people with disabilities.
A consistent message to adopt clean line principles and not to create entrapment risks.

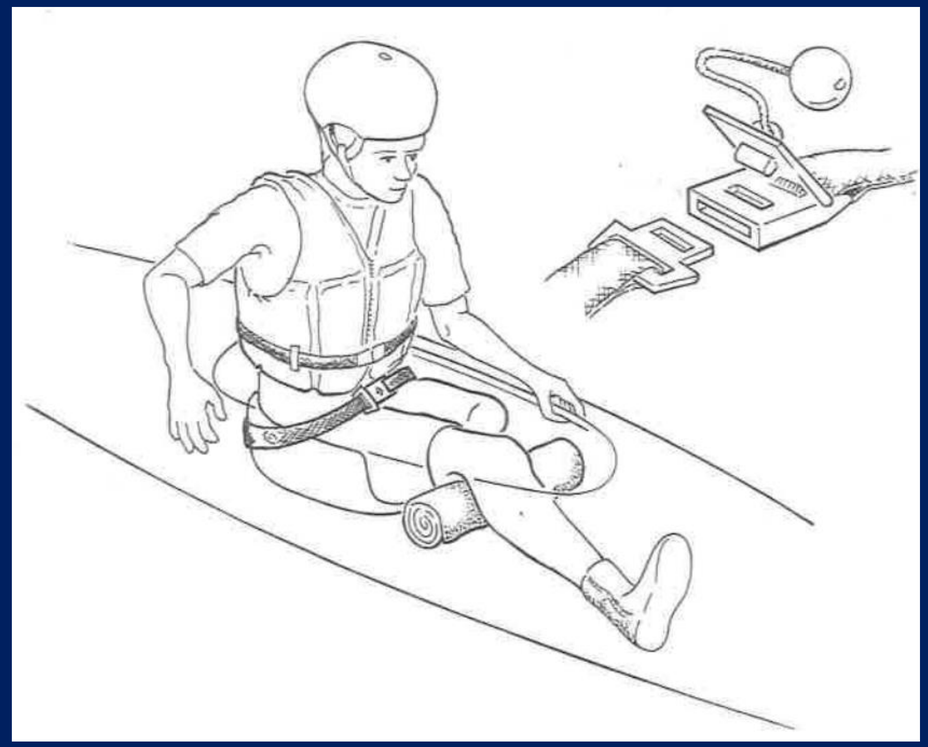
Lap Strap Outfitting Systems in Surf Kayak
There is little or no information in the public domain about the use of strapping systems as very few people are keen to encourage anyone to use a system that could cause drowning in the event of an unsuccessful roll attempt.

Paddability Workshop Programme
No mention of restraints or best practice in the Training Programme

What is the best practice guidance?

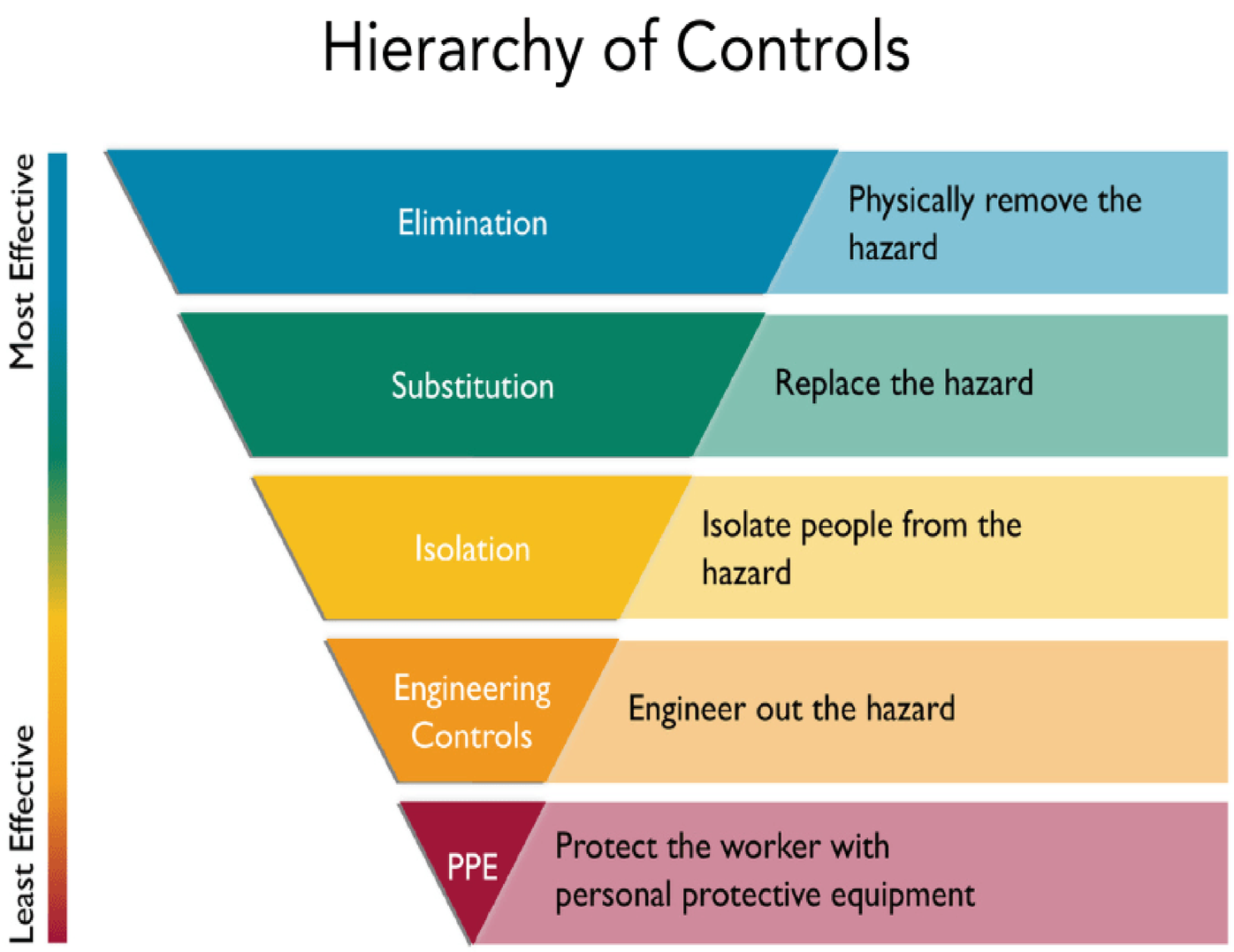
Canoeing for Disabled People by Geoff Smedley (BCU 1995)

Chapter 10: Functional Adaptations or Modifications.



- Highlights the need for good support in order to paddle, therefore good seating is essential.
- States it is not advisable to strap anyone into a craft that could capsize and recommends using rafted canoes as a stable platform.
- Notes that quick release buckles must be used and advises on having a secondary fail safe should the release mechanism fail.
- Identifies the risk of the release mechanism going under the buoyancy aid.

Managing Risk



Do they need a restraint?

Does good postural support remove the need for a restraint?

Is a water-based activity needed to achieve the participants aims?

Can we use a more stable craft?
“You’re gonna need a bigger boat”

If restraint is needed, have we put suitable and sufficient control measures in place – risk assess?

What is the correct floatation for this person and activity – BA or Lifejacket?

Can you rescue this person?

Some Examples of Seating

Some Examples of Seating

Some Examples of Seating

Equal Adventure - Aquabac

www.equaladventure.co.uk

If the seating, craft and activity are right – do you need restraint?

Key considerations if using a restraint

Any boat can capsize!

That capsize can happen quickly before anyone has time to react.

If using restraints, we therefore MUST consider how to manage the risks of a disabled participant capsizing while being strapped into their seat

Some key considerations if using a restraint

1. Can the participant release themselves?
   - Have they practiced in a safe environment?
2. Is the seating attached securely to the craft?
   - If yes what the plan for releasing the participant?
   - If no how does it effect the buoyancy of the individual?
   - How do PFD’s affect both of the above?
3. Have instructors practiced getting to and releasing the participant?
   - Can they reach them with a PFD on?
   - Does their PFD hamper their exit or obstruct the quick release?
   - How long does it take and how long can the participant hold their breath?

Standard ‘Watersports’ Quick Release Belt

- Single quick release point and adjustable

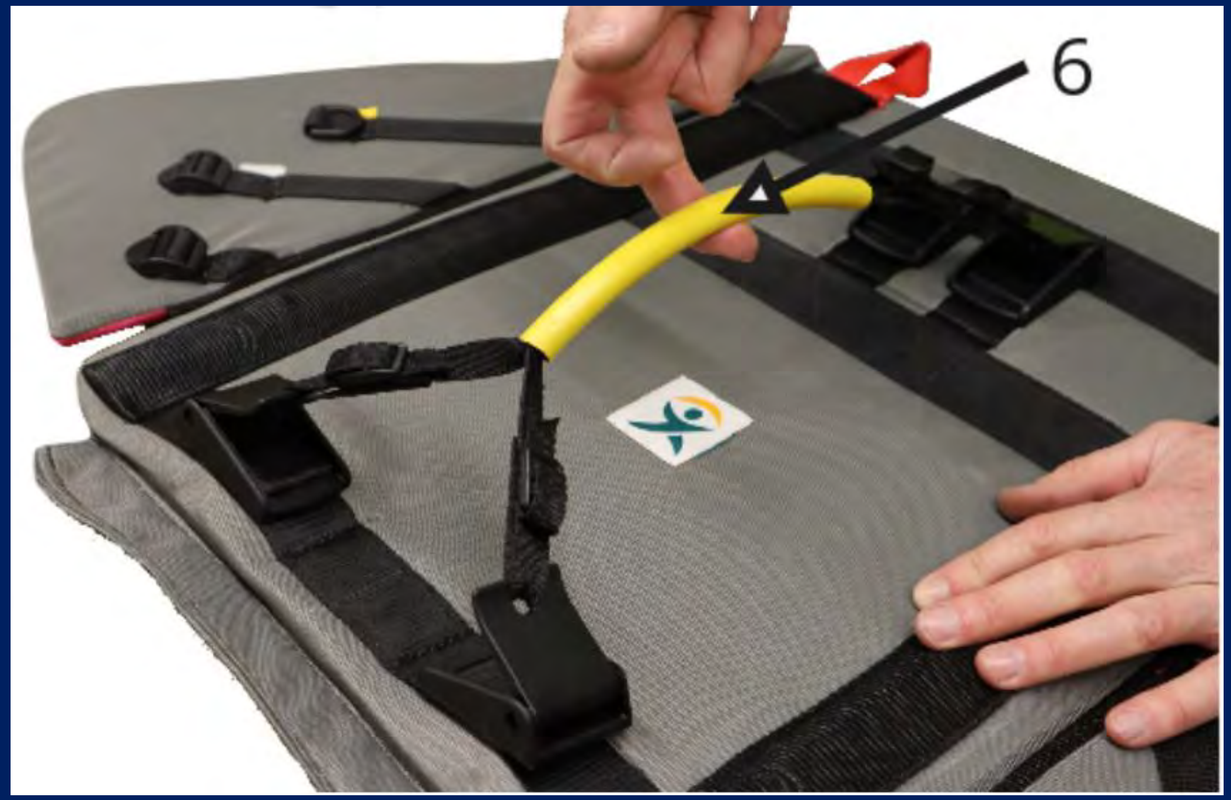
Meets the RYA guidance but have all the risks been considered?

- Can the participant release themselves?
- Can the instructor release them?
- Where’s the secondary release?

‘Double’ Quick Release Belt

- Two quick release points and adjustable
- Provides front and secondary back quick release for an instructor to access

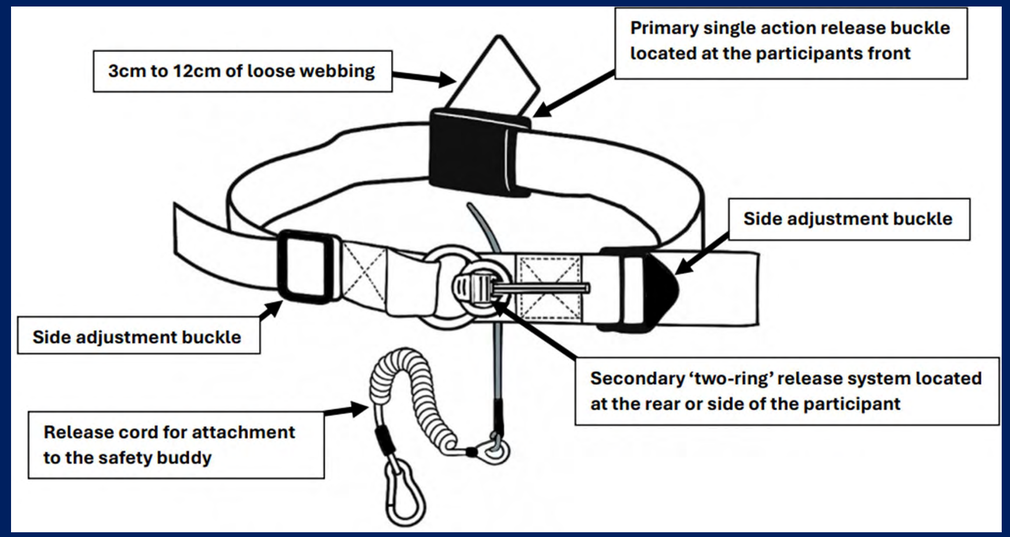
Equal Adventure Aquabac - Quick Release Points



- Harness with built in left and right quick release points and rear release handle.

SAR / ACR / LDCT – Assisted Quick Release Belt

- Belt with front quick release plus rear or side release cord that attaches to a buddy (like an engine kill cord).
- In the event of a capsize, the buddy falling away releases the belt.



www.adventureclimbrescue.co.uk

Questions & Answers