

# Guidance

## On-Water and Indoor Rowing by School Children

## Introduction

The sport of rowing is an activity often started by children of secondary school age and is regarded as a late maturing sport\*. The sport is usually taken up in Year 9, but occasionally and, perhaps increasingly, children of Year 8 age and below are being offered the opportunity to try rowing.

Rowing, whether on-water or indoor, is a power endurance activity and as such there are guidelines in the British Rowing document 'How Much and How Often' ([britishrowing.org/about-us/policies-guidance/safeguarding/guidance-documents/](https://britishrowing.org/about-us/policies-guidance/safeguarding/guidance-documents/)) on the frequency of the activity for those starting out in the sport to ensure that they are safe and allowed to develop over a sensible time.

Initially, short sessions once a week are recommended, particularly for skill development and other activities which promote Agility, Balance, Co-ordination and Skill (ABCS) to develop the athletic, robust and safe rower. Preparation for rowing should include learning to swim and other activities that promote athleticism.

\* In late maturing sports talent identification and development takes place from mid-teenage years through to mid-20s.

## Rationale

### Health and Safety: Back Health

- Rowing is a whole body exercise, is non-weight bearing and low impact. The unique aspect of rowing is that it is a power endurance sport requiring strength and endurance, which is why a significant level of training and racing is not recommended before Year 9.
- Rowing is different from other sports in that the spine is loaded in a sitting position (i.e. 90° to the spine) whereas many sports load directly down the spine.
- In addition the heaviest load is at full flexion of knees and hips (at the 'Catch').
- The load on an indoor rower is equivalent to up to 4.6 times body weight (Morris et al., 2000).
- This loading, whether on-water or indoor, is being repeated multiple times in a minute and for the full duration of the session.
- Therefore, unless correct practice is followed, there is a potential injury risk to susceptible individuals or groups.

### Maintaining Back Health

It is important to ensure postural stability. There is a risk of injury where there is postural instability around the hips, pelvis and lumbar spine during the initial part of the drive phase of the rowing stroke when there is the heaviest load.

To ensure this:

- Good posture and control of the pelvis and spine is required, using deep core and trunk muscles.

British Rowing provides a number of resources and regular workshops ([britishrowing.org/knowledge/courses-qualifications/](http://britishrowing.org/knowledge/courses-qualifications/)) for coaches to support the development and training of these deep core and trunk muscles to enable good postural control.

- Safe and Strong Trunks workshop
- High Quality Land Training workshop
- British Rowing Technique posters (to request posters email [info@britishrowing.org](mailto:info@britishrowing.org))
- These muscles must have the strength and endurance to maintain good posture during the repeated load that occurs over the full duration of the session.
- Good flexibility is strongly encouraged to enable good posture to occur. Again, British Rowing can provide suitable resources to develop flexibility in the rower.
- There must be regular maintenance of the above as muscles will become less effective if not trained.
- Cross training and other physical activities are encouraged to promote the all-round safe athlete.

### **On-Water Rowing Specifics**

Take care to ensure that the 'set up' in the boat enables the rower to achieve the correct positions safely. This requires the relationship between the height of the seat, the feet and the sill of the swivel above the water to be appropriate for the rower (British Rowing has resources available to assist coaches in boat rigging and set up. These include Level 2 and Level 3 Coaching Courses and a Basic Rigging workshop).

### **Indoor Rowing Specifics**

All rowing machines have a way to control the load (drag) and to ensure the set-up on the machine is appropriate for the participant.

- For air resistance machines, such as the Concept2 or Rowperfect, the drag is altered by changing the air flow over the fan. For the Water Rower this is achieved by changing the water levels.
- The drag factor should be kept low for all rowers, but especially beginners and younger participants. A low drag factor simulates on-water rowing and significantly decreases the shearing force across the spine.
- Pauses should be included in the session to enable stretching and to maintain hydration levels.
- Sessions on the rowing machine must include time for a full warm-up and cool-down, as in any energetic activity.

### **Training for Indoor and Outdoor Rowing**

- Appropriate, correct and suitable coaching and learning of 'The British Rowing Technique' provides the basis for performance and for enjoyment of the sport, and allows the rower to be safe, providing their spine and other injury risk areas with proper protection.
- The session length and content must be suitable for the ability and training age of the rower.
- Progression should be gradual and caution/care should be used when changing the quality, quantity or frequency of sessions (Please refer to the British Rowing 'How Much and How Often' document).

## Long-Term Participant Development

### Ensuring movement literacy

To get the best enjoyment and success from on-water and/or indoor rowing, participants should have the ability to:

- Balance
- Co-ordinate leg and trunk movement patterns
- Move in time
- Follow and create rhythm
- Do two-legged and single-leg activity
- Work in a team
- Be flexible
- Have Core and Trunk Stability

It is important that all school children, juniors and beginners focus on developing these skills, along with throwing, catching, striking and kicking, as these will provide the foundation for their future participation in a range of sports. These skills can be best learned as part of a general movement pattern and conditioning programme, which does not require exercising in a boat or on a rowing machine.

### Promoting long term participation

As rowing is a late maturing sport, games and play activities should be promoted for beginners, especially school children and juniors, which foster fun and enjoyment rather than structured activities that mimic specific training. All beginners and young people have the right to be taught correct rowing technique and therefore should have access to quality coaching.

Rowing, both on-water and indoor, should be enjoyable, fun and safe, as well as offering multiple opportunities for the rower. These include recreational, touring, challenge and competitive rowing. This will encourage maximum possible continued participation in the sport.

*This document replaces a previous British Rowing Policy Statement and was approved by the Board in November 2015 following updates by the British Rowing Technical Panel.*

## References

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