



# **NATIONAL ROWING CENTRE OF EXCELLENCE**

## **MUSCULOSKELETAL SCREENING DOCUMENT**

*(UPDATED 25/03/09)*

## **EXPLANATORY NOTES**

A meeting of NRCE network physiotherapists in February 2009 revised this screening protocol.

This musculo-skeletal screening relies heavily on input from the coach, strength and conditioning coach and the athlete. Pages 3,4 & 5 should all be completed prior to the athlete attending the screening.

The athlete should also present to the screening with video footage of recent on water or ergometer rowing. This video footage can be viewed by the therapist to ascertain the quality of posture and body position during the rowing stroke. The meeting felt that this would be far more valuable than time spent doing a number of so called “stability” tests for the trunk.

More than predicting any risk of injury, this screening is designed to detect whether an athlete has adequate movement in keys areas to allow for optimal technique.

This screening only contains tests that have been shown to be reliable, repeatable and though to be relevant to rowing. Over time it is hoped that data collected will demonstrate which tests are truly predictive of any injury risk.

The results of these tests are to be reported to the NRCE using the reporting form where the athlete is a SIS/SAS scholarship holder.

Other tests can be added as required based on the findings of the coach & athlete evaluation sections, or according to personal preferences of the examining physiotherapist.

## **ORDER FOR SCREENING**

- 1. Coach to complete “Coach Evaluation” section**
- 2. Strength and Conditioning Coach to complete “Strength & Conditioning Coach Evaluation”**
- 3. Athlete to complete the “Athlete Evaluation” section**
- 4. All of these sections to be returned to the Physiotherapist prior to the screening**
- 5. Athlete and coach to obtain brief video footage of either on water or Ergometer rowing**
- 6. Video footage ideally to be supplied to the Physiotherapist prior to the screening**
- 7. Physiotherapist to collate information from the evaluation forms, plus video to help plan additional areas to be examined in screening**
- 8. Conduct the screening**
- 9. Planning session with Coach and Strength & Conditioning Coach**
- 10. Feedback session with athlete to convey what was agreed in step 9**
- 11. Targeted review session at 6-8 weeks post screening**

## 12. COACH EVALUATION

TO BE COMPLETED BY ROWING COACH PRIOR TO SCREENING APPOINTMENT

ATHLETE: \_\_\_\_\_

COACH: \_\_\_\_\_

Perceived technical weaknesses / limitations	
Coach to record briefly any issues that are impacting on the athlete's ability to achieve optimal on water technique. I.e. lack of flexibility in certain positions, poor postural positioning etc.	
1.	
2.	
3.	
4.	
5.	
General Comments	

**STRENGTH AND CONDITIONING COACH EVALUATION**

**TO BE COMPLETED BY S&C COACH PRIOR TO SCREENING APPOINTMENT**

**ATHLETE:** \_\_\_\_\_

**COACH:** \_\_\_\_\_

<b>Perceived technical weaknesses / limitations</b>	
S&C Coach to record briefly any issues that are impacting on the athlete's ability to achieve optimal technique in the gymnasium, with a particular focus on inability to perform the lifts such as cleans and squats. I.e. lack of flexibility in certain positions, poor postural positioning etc.	
1.	
2.	
3.	
4.	
5.	
<b>General Comments</b>	

## ATHLETE EVALUATION

TO BE COMPLETED BY THE ATHLETE PRIOR TO THE SCREENING APPOINTMENT

### Injury History

Date	Type of Injury (diagnosis if known or description)	Injury Treatment Summary (eg. physio, surgery, none, or rest)	100% now? Y/N

### Specific areas that you would like to work on or improve

This section is for the athlete to list what areas they feel they need to improve on

1.	
2.	
3.	
4.	
5.	

### Do you use?

- foot orthotics      Type \_\_\_\_\_
- braces or tape      Type \_\_\_\_\_

**ERGOMETER / ON WATER VIDEO EVALUATION (Physiotherapist to complete)**

<b>Physiotherapist to comment on quality of posture and body position in the following points during the stroke cycle</b>	
Stable spine at the catch	
Stable spine during mid drive	
Stable spine at the finish	
Good pelvic motion at rock over	
Good scapular positioning throughout	
<b>Issues to look at further during screening</b>	

## ROWING MUSCULOSKELETAL SCREENING

(to be carried out by an appropriately experienced NRCE Network Physiotherapist)

Testing Date: \_\_/\_\_/\_\_ Athlete's name: \_\_\_\_\_

DOB: \_\_/\_\_/\_\_ Age: \_\_\_\_ Male  Female

Height: \_\_\_\_\_ cm Weight: \_\_\_\_\_ kg

Position:  cox  stroke  bow

Events:  scull  sweep  lightweight  heavyweight

Coach: \_\_\_\_\_ Contact: \_\_\_\_\_

### Administration Items

Test Venue : \_\_\_\_\_ Practitioner : \_\_\_\_\_

### Consent

1. I understand that this questionnaire enables medical staff to assist in the management of my medical condition, to enable optimum treatment
2. I understand that this questionnaire enables medical staff to ensure that I am fit to train and compete
3. I am aware that some information may require clarification or follow-up with my treating doctor and / or physiotherapist and agree to release of relevant information to these people
4. I am aware that medical fitness issues may be discussed with my coach and high performance staff
5. I understand that the information contained in this form is otherwise confidential and can only be released with my consent.

Athlete consent for testing: \_\_\_\_\_

## STANDING TESTS

### ANKLE

Position	Mobility Tests	Left	Right
Standing	Dorsiflexion WB - Lunge		

## LONG SITTING TESTS

### GENERAL FLEXIBILITY

Position	Mobility Tests	Left	Right
Sitting	Sit & Reach		

## SITTING TESTS

### SHOULDER

Position	Stability Tests	Left	Right
Sitting	Pop / Pull Test		

### TRUNK/SPINE

Position	Special Tests	Left	Right
Sitting	Active Slump (DF)		

  

Position	Mobility Tests	Left	Right
Sitting	Thoracic Rotation		

### HIP

Position	Mobility Tests	Left	Right
Sitting	Modified Thomas	hip abd ___° hip ext ___° knee flex ___°	hip abd ___° hip ext ___° knee flex ___°
Sitting	(90/90) Hip internal rotation		





**NATIONAL ROWING CENTRE OF EXCELLENCE**

**MUSCULO-SKELETAL SCREENING REPORT FORM**

<b>Name :</b>					
<b>Date :</b>			<b>SIS / SAS :</b>		
<b>Therapist :</b>					
Issues arising from Coach Evaluation:					
Issues arising from S&C Coach Evaluation:					
Issues arising from Athlete Evaluation / History:					
	Left	Right		Left	Right
Ankle DF			Sit & Reach		
Thomas (Hip E)			Hip Flex		
Hip IR			Active Knee Ext		
Active Slump			Thoracic Rotn		
Pop / Pull Test					
Technique evaluation:					
Recommendations:					
Follow Up Date:					