



Canoe Polo Fitness Testing Protocols



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TABLE OF CONTENTS

Page 1: Introduction/Height & Weight/400m Run

Page 2: 4000m run/bench press/chin ups/17.5m sprint

Page 3: 10m out and back/distance throw

Page 4: 200m Swim



Introduction

In order to improve the quality of training for athletes across the country, CKC – Canoe Polo is introducing standardized testing protocols. Enhancing the level of fitness for Canadian canoe polo athletes has been identified as a major goal necessary to achieve international success. The goals of these tests are to identify areas of strength and weakness which can be used to modify training to improve overall performance.

Canoe polo is a sport that demands substantial skill (tactics and technique), muscular endurance, strength, power, flexibility, and core stability, as well as developed aerobic and anaerobic energy systems^{1,2}.

The following protocols will be split into mandatory tests and optional tests. The mandatory tests include height, weight, 400 m run, 4000m run, bench press – 2minutes, and chin ups – 2 minutes. All other tests are optional tests and may be used for further fitness analysis.

STATION 1: HEIGHT & WEIGHT

Equipment Needed: Weight and height scale

Set-up Instructions: None needed

Data to Record: Weight to the nearest 0.1kg, Height to the nearest 0.5cm

Instructions:

-Height: Slide the head piece up and have athlete take shoes off and stand with back against the height scale. Slide the head piece down to the top of the head and ask the athlete to move away from the wall and record the centimeters.

-Weight: Have the athlete step on the scale without shoes and read weight to nearest 0.1 kg.

Justification for Test: Height and weight is fundamental for the validity of other tests. It is a means to measure BMI and track changes in body composition.

STATION 2: 400 METER RUN

Equipment Needed: This test should be performed on a 400m track or flat surface.

Set-up Instructions: Warm up with a light jog, short sprint & dynamic stretch. The starting commands are “Ready, Set, Go”.

Data to Record: Record time to the nearest 0.1 second.

Instructions:

- The athlete must complete the 400 meters as fast as possible. Instruct the athletes that it is a relaxed sprint.



Justification for Test: The 400 meter test will test their anaerobic lactic system. Due to the intermittent nature of canoe, you must be able to perform a large amount of work and have a well developed anaerobic system¹ to be successful both on offense and defense.

STATION 3: 4000 METER RUN

Equipment Needed: This test should be performed on a 400m track or flat surface.

Set-up Instructions: Warm up with a light jog, short sprint & dynamic stretch. The starting commands are “Ready, Set, Go”. This test should be completed 10 minutes following the 400 meter test.

Data to Record: Record time to the nearest 0.1 second.

Instructions:

- The athlete must complete the 4000 meters as fast as possible.

Justification for Test: The 4000 meter test will test their aerobic system. A canoe polo game is 20 minutes and requires a well developed aerobic system. A good aerobic system will help you recover quicker between games and between high intensity efforts during a game.

STATION 4: BENCH PRESS – 2 MINUTES

Caution: If you are not currently strength training, this testing should be avoided.

Equipment Needed: Olympic bar, bench, weight, stop watch.

Set-up Instructions: The weight for Senior Men is 75lbs, Jr Men 65lbs, Women 45lbs.

Data to Record: Total number of completed repetitions in 2 minutes.

Instructions: Timing starts from a straight arm position. Athletes must touch their chest every rep (girls can stop 1cm from their chest) and return to a straight arm position. Athletes can rest in a straight arm position only. **The test last 2min or to the point when an athlete can no longer hold the weight.**

Justification for Test: This is a measure of upper body muscular endurance.

STATION 5: CHIN UPS – 2 MINUTES

Equipment Needed: Chin up bar, stop watch.

Set-up Instructions: none-required

Data to Record: Total number of **completed** repetitions in 2 minutes (poor quality chin ups will not be counted).

Instructions: Timing starts from a straight arm position (hanging position). All Ups must bring the chin above bar level and every repetition down to straight arm. **No kicking or swinging.** The athlete is allowed to dismount the bar and return to the bar within the 2 minutes.

Justification for Test: This is a measure of upper body muscular endurance.



STATION 6: 17.5 METER KAYAK SPRINT

Equipment Needed: measuring tape, pylons, stop watch.

Set-up Instructions: place two pylons 17.5 meters apart.

Data to Record: Two trials are completed. Record time for the best trial to the nearest 0.1 second.

Instructions: Two markers are placed 17.5m apart on the side of pitch. The athletes should warm up. The body is lined up at the starting marker. The start command is a “Ready, Set, Go”. The test stops once the body crosses the end marker. The athlete gets two attempts. The best attempt is recorded. The final time is recorded in seconds.

Justification for Test: This is a measure kayaking speed and acceleration.

STATION 7: 10 METER OUT AND BACK KAYAK RACE

Equipment Needed: measuring tape, pylons, stop watch, two volunteers.

Set-up Instructions: place two pylons 10 meters apart.

Data to Record: Record time to the nearest 0.1 second.

Instructions: The starting position is body on the line. The start command is a “Ready, Set, Go”. The test consists of 8 laps (there + back) of the two markers. A volunteer will be at each marker and ensure the athletes reach each marker with their body. Athletes will alternate turning right and left. Time will be taken following the completion of 8 laps.

Justification for Test: This is a speed endurance test. This test is similar to an offence of player driving in and out of the zone.

STATION 8: Distance Throw

Equipment Needed: measuring tape.

Set-up Instructions: N/A

Data to Record: 3 trials with each hand to the nearest cm, alternating between right and left. Record best score for each hand.

Instructions: The athlete lines their body up on the start (zero) line. The athlete gets three throws in each hand. The best of each hand is recorded as the final score.

Justification for Test: Long throw is a measure of throwing power. The ability to throw long is important for fast break opportunities and is a measure of overall throwing power.



STATION 9: 200 METER SWIM

Equipment Needed: This test should be performed in a 25meter pool.

Set-up Instructions: Warm up with a light swim, short sprint & dynamic stretch. The athletes must start in the water with both feet on the wall of the pool. The starting commands are “Ready, Set, Go”.

This test should be completed on a separate day from the other tests in a 25meter pool.

Data to Record: Record time to the nearest 1 second.

Instructions:

- The athlete must complete the 200 meters as fast as possible.
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Justification for Test: The 200 meter test will test their aerobic power/anaerobic endurance system. A canoe polo shift is approximately 2-3 minutes and requires good upper body strength.