The 300-yard shuttle run is an excellent test of the anaerobic lactic endurance capacity and agility of an athlete. The use of this test is more beneficial than the quarter-mile in any sport in which rapid changes of direction in both the vertical and horizontal planes of movement are required. Athletes in sports such as soccer, rugby and, to a lesser extent, football would benefit from this test. Other sports where the test would be most applicable are basketball, baseball, wrestling and field hockey. The test could also be modified for use on ice by the ice hockey player.

The 300-yard shuttle run can be utilized as a training exercise run with a 2:1 (recovery:work) ratio to stimulate the lactic acid system. This enables the athlete to handle extreme levels of lactate accumulation while maintaining high performance levels.

Since this is a test of the lactic acid capacity, trialists should emphasize this system in their training sessions. For example, repeated workouts of 45 to 80 seconds with a 2:1 (recovery:work) ratio would tax this system and thereby aid in adaptation. Other drills that emphasize agility would complement a running program to help lower the athlete’s 300-yard shuttle run time.

There is some interplay of the phosphagen (ATP-PC) system within this particular test, especially in relation to the short burst of acceleration immediately after the turn to complete the next lap of the 25-yard course.
Procedure Checklist for the 300-yard Shuttle Run

Equipment Needed
- A clean area of flooring free of clutter, preferably a gym floor
- Two stopwatches (1/10 second)
- Two parallel lines marked on the floor, 25 yards apart
- Two persons, one to time the run, one to time the recovery period

The Test
- The athlete positions himself or herself behind the first of the parallel lines that are 25 yards apart.
- On the “GO” command, the athlete sprints from line A to line B, turns quickly and sprints back to line A. This is one complete trip. The athlete completes six continuous round trips for a total of 300 yards.
- Foot contact must be made on lines A and B when changing direction.

Procedure
- Upon completion of the first 300-yard trial, a second watch is started to give the athlete a five-minute rest interval. The time for the first 300-yard run is recorded. During the rest interval, the athlete is allowed to walk and stretch to facilitate recovery. The athlete should stay alert for the starting signal of the second trial.
- At the 4:45 mark, the starter should call the athlete to the starting line. Exactly five minutes after the end of the first trial, the starter should give the “GO” command to begin the second trial.
- The athlete completes the 300-yard shuttle run course as he or she did during the first trial, and the time is recorded.
- After both trials have been completed, the two times should be added together and divided by two. The average time should be recorded to the nearest 1/10 second.

Reasons for Disqualification
- Not touching lines A and/or B with the foot during the shuttle run
- Not beginning trial two immediately after the five-minute rest period

This peer-reviewed checklist reflects accepted guidelines of the National Strength and Conditioning Association. Copyright 1991, all rights reserved.
300-yard Shuttle Run

Choose the best answer for each question.

1. The 300-yard shuttle run tests
   A. anaerobic power and quickness.
   B. anaerobic endurance and agility.
   C. reaction time and aerobic endurance.
   D. anaerobic endurance and strength.

2. An example of a sport which would utilize the 300-yard shuttle run test is
   A. tennis.
   B. softball.
   C. rugby.
   D. ice skating.

3. If used as a training exercise run, the appropriate recovery-to-work ratio for the 300-yard distance is
   A. 3:1.
   B. 2:1.
   C. 1:1.
   D. 1:2.

4. The distance between the two parallel lines is
   A. 25 yards.
   B. 30 yards.
   C. 45 yards.
   D. 50 yards.

5. The athlete is required to complete
   A. four trips.
   B. five trips.
   C. six trips.
   D. seven trips.

6. The rest interval between trials is
   A. 2 minutes.
   B. 3 minutes.
   C. 4 minutes.
   D. 5 minutes.

7. During the rest interval, the athlete is allowed to
   A. sit down.
   B. walk and stretch.
   C. jog slowly.
   D. stand quietly.

8. The number of trials that the athlete must perform is
   A. two.
   B. three.
   C. four.
   D. five.

9. The athlete's 300-yard shuttle run time is determined by the
   A. average time of the trials.
   B. best trial time.
   C. average of the three fastest trials.
   D. first trial time.

10. The athlete can be disqualified by
    A. beginning the trials after a five-minute rest period.
    B. staying alert for the start of the next trial.
    C. stretching the legs during the rest period.
    D. not touching the lines with the foot during the test.

The answer to this quiz will be found in Volume 13, Number 3 of the NSCA Journal.

Answers to the C.S.C.S. CEU Quiz in Volume 13 Number 1 of the NSCA Journal:
C.S.C.S. CEU Quiz
Answer Form

300-yard Shuttle Run

#  A  B  C  D
1. 〇 〇 〇 〇
2. 〇 〇 〇 〇
3. 〇 〇 〇 〇
4. 〇 〇 〇 〇
5. 〇 〇 〇 〇
6. 〇 〇 〇 〇
7. 〇 〇 〇 〇
8. 〇 〇 〇 〇
9. 〇 〇 〇 〇
10. 〇 〇 〇 〇

Directions:

Pencil in the circle that represents your selection of the best answer for each of the previous questions. To receive 0.3 CEUs, you must (1) answer 70 percent of the questions correctly, (2) complete the form below, (3) include a $10 check payable to the NSCA and (4) mail these by August 9, 1991, to:

CEU Department
NSCA
P.O. Box 81410
Lincoln, NE 68501

Last Name  First  MI
Address
City
State/Province  ZIP/Postal Code
Certificate #  Social Security #
C.S.C.S.
EXAMINATION
1991-1992

1991

FEBRUARY
Saturday, February 2
Colorado Springs, Colorado
*Orlando, Florida
Fresno, California
*Raleigh, North Carolina
Early registration deadline: 12-7-90
Registration cut-off: 12-21-90

MAY
Saturday, May 4
Omaha, Nebraska
Syracuse, New York
Lansing, Michigan
Lubbock, Texas
Early registration deadline: 3-8-91
Registration cut-off: 3-22-91

JUNE
Thursday, June 20
**St. Louis, Missouri
Clarion Hotel
Early registration deadline: 6-13-91
Registration cut-off: 5-3-91

AUGUST
Saturday, August 10
*New York, New York
Los Angeles, California
Minneapolis, Minnesota
*Milwaukee, Wisconsin
Early registration deadline: 6-14-91
Registration cut-off: 6-28-91

NOVEMBER
Saturday, November 30
Nashville, Tennessee
Corpus Christi, Texas
Baltimore, Maryland
Salt Lake City, Utah
Early registration deadline: 10-4-91
Registration cut-off: 10-18-91

No registration will be accepted if postmarked after the registration cut-off date.

1991 Examination fees for members:
$105 postmarked on or before early registration deadline.
$130 postmarked after designated early registration date but on or before registration cut-off date

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CPR certificate is a requirement for the exam. This means that proof of current certification must be presented when applying to sit for the examination.

For more information contact:
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P.O. Box 81410
Lincoln, NE 68501
(402) 472-3000
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Specific site locations will be sent with confirmation (after application).

The NSCA retains the right to cancel scheduled examinations.

Please note that some of the deadlines and sites for the 1991 examination have changed.
* Designates changed exam site
** Designates National Conference location

1992

FEBRUARY
Saturday, February 1
Tucson, Arizona
Coral Gables, Florida
Iowa City, Iowa
Cleveland, Ohio
Early registration deadline: 12-7-91
Registration cut-off: 12-20-91

MAY
Saturday, May 2
Los Angeles, California
New Haven, Connecticut
Louisville, Kentucky
Las Vegas, Nevada
Early registration deadline: 3-6-92
Registration cut-off: 3-20-92

JUNE
Thursday, June 18
**Philadelphia, Pennsylvania
Early registration deadline: 4-23-92
Registration cut-off: 5-7-92

AUGUST
Saturday, August 8
Fresno, California
Indianapolis, Indiana
Oklahoma City, Oklahoma
Washington, D.C.
Early registration deadline: 6-12-92
Registration cut-off: 6-26-92

NOVEMBER
Saturday, November 28
San Francisco, California
Atlanta, Georgia
Chicago, Illinois
Dallas/Fort Worth, Texas
Early registration deadline: 10-2-92
Registration cut-off: 10-16-92