

FUNCTIONAL FITNESS ASSESSMENT PROTOCOL AND TESTING STANDARDS

The functional fitness assessment tests **MUST** be performed consecutively in the following order with the prescribed rest periods between tests. **If one or more of the tests cannot be performed (e.g. pushups cannot be performed because of a shoulder injury, etc.) then the score must be entered as ZERO. If the aerobic fitness test is not performed, enter a time of 0 minutes and 0 seconds in one of the options (run, walk, row).**

1. Aerobic Fitness Test
2. Rest 5 minutes
3. Upper Body Strength/Endurance (Push-up) Test
4. Rest 3 minutes
5. Lower Body Strength/Endurance (Squat) Test
6. Rest 3 minutes
7. Core Strength/Endurance (Plank) Test

AEROBIC FITNESS TEST STANDARDS

Subjects perform **ONE** of the following tests.

One Mile Run Test: Measure a mile distance route either on a track (4 laps) or at another location. Test begins when subject crosses start line and ends when subject crosses finish line. No restrictions on mode of movement (ie can run, jog, walk) in order to finish. Treadmill is acceptable.

One Mile Walk Test: Measure a mile distance route either on a track (4 laps) or at another location. Test begins when subject crosses start line and ends when subject crosses finish line. **WALKING ONLY** - test is not valid if subject jogs or runs. Treadmill is acceptable.

Rowing Test: The objective of this test is to row as far as possible during the 4 minute time period. Subject begins in coiled position (knees bent) and clock starts as soon as subject begins to row. At 4 minutes the distance is recorded. Most rowing machines will have a computer that will set the time and record the distance automatically.

UPPER BODY STRENGTH/ENDURANCE (PUSH UP) TEST STANDARDS

Subject begins test lying face down on floor or ground with chest in contact with the ground and with hands flat on ground approximately shoulder width apart and with toes pointing into ground with feet approximately 8 inches apart. This is the “down position”. Both male and female perform the same type of pushup (knees straight, “full” pushup). The final scoring of the results will depend on age and gender.

The “up position” is with ELBOWS FULLY EXTENDED and BACK STRAIGHT.

Each time the subject reaches the “up position” is counted as one repetition.

To begin test subject pushes up from down position. There is NO resting in up or down position; the push-ups must be done continuously.

If subject delays more than one second in down or up position a warning is given to IMMEDIATELY continue. If this is not done the test is over. A maximum of three reminders to maintain continuous motion are allowed. If a fourth reminder is required the test is immediately over.

*Instruct subject to inhale on the way down toward the down position and exhale on the up toward the up position. Do NOT hold breath!

Pushups - Down Position



Pushups - Up Position



LOWER BODY STRENGTH/ENDURANCE (SQUAT) TEST STANDARDS

Subject begins standing with legs straight, feet slightly wider than shoulder width apart, and with toes slightly pointing out. This is the “up position”.

The “down position” is LEGS BENT AT LEAST 90 DEGREES.

Each time the subject reaches the “up position” is counted as one repetition.

To begin test subject begins to squat down into the “down position”. There is NO resting in up or down position.

If subject delays more than one second in down or up position a warning is given to IMMEDIATELY continue. If this is not done the test is over. A maximum of three reminders to maintain continuous motion are allowed. If a fourth reminder is required the test is immediately over.

*Instruct subject to inhale on the way down toward the down position and exhale on the up toward the up position. Do NOT hold breath!

*Instruct subject to push knees slightly outward as they bend and straighten their legs. Ensure that the knees do not move forward beyond the toes (i.e. squat back with chest up as opposed to squatting forward). A chair/medicine ball may be placed behind the subject to protect against falls and to provide a guide for depth of squat).

Squats - Down Position



Squats - Up Position



CORE STRENGTH/ENDURANCE (PLANK) TEST STANDARDS

Subject begins on flat surface (floor or field or mat etc) lying face down propped up on elbows with torso in contact with the ground surface.

Subject indicates readiness to begin and then gets up onto toes and elbows into the plank position (see below). Upon assumption of the proper plank position (head in neutral position, flat back, straight legs) the timing begins.

Proper plank position **MUST BE MAINTAINED**. If back arches or buttocks raises then a warning is given to **IMMEDIATELY** return to proper plank position. If this is not done the test is over and the time is recorded at that moment. A maximum of three reminders to maintain position are allowed. If a fourth reminder is required the test is over.

If the subject's stomach or knees touch the ground surface at any time the test is immediately over.

*Make sure subject breathes properly. Do NOT hold breath!

Plank - Hold Position



HRA Functional Fitness Targets

Plank

Use same for both genders.

15-29	120
30-39	110
40-49	100
50-59	80
60-69	60
70+	40

Squats

Use same for both genders.

15-29	100
30-39	90
40-49	80
50-59	60
60-69	40
70+	20

Pushups

15-29	42	62
30-39	40	52
40-49	25	45
50-59	20	40
60-69	15	30
70+	10	20

HRA Functional Fitness Targets

Aerobic Exercise - Running 1.6 km/1 mile

15-29	6:45	6:00
30-39	7:00	6:15
40-49	7:15	6:30
50-59	7:45	7:00
60-69	8:45	8:00
70+	9:45	9:00

Aerobic Exercise - Walking 1.6 km/1 mile

15-29	13:12	11:54
30-39	13:42	12:24
40-49	14:12	12:54
50-59	14:42	13:24
60-69	15:06	14:06
70+	16:18	15:06

Rowing - Meters in 4 Minutes

15-29	1092	1260
30-39	1054	1232
40-49	1037	1215
50-59	1024	1177
60-69	1008	1136
70+	968	1057