

Seated Step Test

1. Four-stage, graded low-level test developed specifically for use in older adults
 - a. Stage 1 of the test goes to 2.3 METs - $VO_2 = 8\text{ml/kg/min}$
 - b. Stage 2 goes to 2.9 METs = 10ml/kg/min
 - c. Stage 3 goes to 3.5 METs (= to walking 3.5 miles per hour, a fairly brisk pace) = 12.3ml/kg/min
 - d. Stage 4 go to 3.9 METs = 13.7ml/kg/min
2. Subject sits in a standard (16") straight-backed chair, no armrests, with both feet flat on the floor
3. A step or bar is placed in front of the subject such that when the leg is extended, the heel can reach the top of the step and the ankle is even with the edge
4. Metronome, set for 1 second beats so that on first beat, the subject touches the front edge of the step or bar with the arch of one foot, on the second beat returns the foot to the floor, alternating feet
5. Determine 75% of their max HR
6. Measure HR, BP, pulse ox, and RPE
7. Stage 1 uses a 6-inch step
8. Beginning at 1 minute 45 seconds into Stage 1, measure HR, BP, pulse ox, and RPE
9. At end of 2 minutes, if no stopping criteria (HR beyond 75% max HR, SOB, discomfort, increased BP, etc) then continue for 5 more minutes (total 7 minutes)
10. At the end of the 7 minutes, record HR, BP, pulse ox, and RPE and consider again presence of any stopping criteria
11. Instruct to keep stepping between stages
12. Test continues to stage 2, using a 12-inch step or bar
13. Procedures for each stage identical
14. Stage 3 uses an 18-inch step or bar
15. Stage 4 uses an 18-inch step or bar and adds arm movement (palms on knees, extend right leg as raise right arm to shoulder level)
16. Whenever stop, record HR, BP, pulse ox, and RPE and note stage at which the test was terminated

	Heart Rate	Blood Pressure	Pulse Ox	RPE
Pre-test				
Stage 1 - 6" step (1 min 45 sec)				
Stage 1 - 6" step (end of 7 min)				
Stage 2 - 12" step (1 min 45 sec)				
Stage 2 - 12" step (end of 7 min)				
Stage 3 - 18" step (1 min 45 sec)				
Stage 3 - 18" step (end of 7 min)				
Stage 4 - 18" step + arms (1 min 45 sec)				
Stage 4 - 18" step + arms (end of 7 min)				
Post-test				

Note where test terminated _____