

## Short Physical Performance Battery

**About:** This battery assesses lower extremity function in adults.

**Items:** 5

**Reliability:**

Internal consistency of the SPPB is 0.76

**Validity:**

Has predictive validity, showing a gradient of risk for mortality, nursing home admission, and disability.

**Scoring:**

See scoring information in each section.

Scores range from 0 (worst performance) to 12 (best performance).

**References:**

Guralnik, J. M., Simonsick, E. M., Ferrucci, L., Glynn, R. J., Berkman, L. F., Blazer, D. G., Scherr, P. A., Wallace, R. B. (1994) [A short physical performance battery assessing lower extremity function: Association with self-reported disability and prediction of mortality and nursing home admission.](#) *Journal of Gerontology*, 49, M85-M94.

## Short Physical Performance Battery

### 1. Repeated Chair Stands

**Instructions:** Do you think it is safe for you to try and stand up from a chair five times without using your arms? Please stand up straight as quickly as you can five times, without stopping in between. After standing up each time, sit down and then stand up again. Keep your arms folded across your chest. Please watch while I demonstrate. I'll be timing you with a stopwatch. Are you ready? Begin

**Grading:** Begin stop watch when subject begins to stand up. Count aloud each time subject arises. Stop the stopwatch when subject has straightened up completely for the fifth time. Also stop if the subject uses arms, or after 1 minute, if subject has not completed rises, and if concerned about the subject's safety.. Record the number of seconds and the presence of imbalance.. Then complete ordinal scoring.

**Time:** \_\_\_\_\_ sec (if five stands are completed)

**Number of Stands Completed:** 1 2 3 4 5

**Chair Stand Ordinal Score:** \_\_\_\_\_

0 = unable

1 = > 16.7 sec

2 = 16.6-13.7 sec

3 = 13.6-11.2 sec

4 = < 11.1 sec

### 2. Balance Testing

Begin with a semitandem stand (heel of one foot placed by the big toe of the other foot). Individuals unable to hold this position should try the side-by-side position. Those able to stand in the semitandem position should be tested in the full tandem position. Once you have completed time measures, complete ordinal scoring.

#### a. Semitandem Stand

**Instructions:** Now I want you to try to stand with the side of the heel of one foot touching the big toe of the other foot for about 10 seconds. You may put either foot in front, whichever is more comfortable for you. Please watch while I demonstrate.

**Grading:** Stand next to the participant to help him or her into semitandem position. Allow participant to hold onto your arms to get balance. Begin timing when participant has the feet in position and lets go.

**Circle one number**

- 2. Held for 10 sec
- 1. Held for less than 10 sec; number of seconds held \_\_\_\_\_
- 0. Not attempted

**b. Side-by-Side stand**

**Instructions:** I want you to try to stand with your feet together, side by side, for about 10 sec. Please watch while I demonstrate. You may use your arms, bend your knees, or move your body to maintain your balance, but try not to move your feet. Try to hold this position until I tell you to stop.

**Grading:** Stand next to the participant to help him or her into the side-by-side position. Allow participant to hold onto your arms to get balance. Begin timing when participant has feet together and lets go.

**Grading**

- 2. Held of 10 sec
- 1. Held for less than 10 sec; number of seconds held \_\_\_\_\_
- 0. Not attempted

**c. Tandem Stand**

**Instructions:** Now I want you to try to stand with the heel of one foot in front of and touching the toes of the other foot for 10 sec. You may put either foot in front, whichever is more comfortable for you. Please watch while I demonstrate.

**Grading:** Stand next to the participant to help him or her into the side-by-side position. Allow participant to hold onto your arms to get balance. Begin timing when participant has feet together and lets go.

**Grading**

- 2. Held of 10 sec
- 1. Held for less than 10 sec; number of seconds held \_\_\_\_\_
- 0. Not attempted

**Balance Ordinal Score:** \_\_\_\_\_

- 0 = side by side 0-9 sec or unable
- 1 = side by side 10, <10 sec semitandem
- 2 = semitandem 10 sec, tandem 0-2 sec
- 3 = semitandem 10 sec, tandem 3-9 sec
- 4 = tandem 10 sec

**3. 8' Walk (2.44 meters)**

**Instructions:** This is our walking course. If you use a cane or other walking aid when walking outside your home, please use it for this test. I want you to walk at your usual pace to the other end of this course (a distance of 8'). Walk all the way past the other end of the tape before you stop. I will walk with you. Are you ready?

**Grading:** Press the start button to start the stopwatch as the participant begins walking. Measure the time take to walk 8'. Then complete ordinal scoring.

**Time:** \_\_\_\_\_ sec

**Gait Ordinal Score:** \_\_\_\_\_

- 0 = could not do
- 1 = >5.7 sec (<0.43 m/sec)
- 2 = 4.1-6.5 sec (0.44-0.60 m/sec)
- 3 = 3.2-4.0 sec (0.61-0.77 m/sec)
- 4 = <3.1 sec (>0.78 m/sec)

**Summary Ordinal Score:** \_\_\_\_\_

**Range:** 0 (worst performance) to 12 (best performance).