



## BERG Balance Scale

### DESCRIPTION:

A Standardized Balance Test designed to measure balance of the older adult in a clinical setting.

### EQUIPMENT NEEDED:

Yardstick, 2 standard chairs (one with arm rests, one without), Footstool or step, Stopwatch or wristwatch, 15 ft walkway

### SCORING:

A five-point ordinal scale, ranging from 0-4. "0" indicates the lowest level of function and "4" the highest level of function. Score the LOWEST performance. Total Score = 56

### INTERPRETATION:

41-56 = independent  
21-40 = walking with assistance  
0 -20 = wheelchair bound<sup>1</sup>

### CUT OFF SCORES :

- Score of < 45 indicates individuals may be at greater risk of falling (Berg, 1992) Berg K, Wood-Dauphinee S, Williams JI, Maki, B. (1992). Measuring balance in the elderly: validation of an instrument. Can. J. Pub. Health July/August supplement 2:S7-11
- History of falls and BBS < 51, or no history of falls and BBS < 42 is predictive of falls (91% sensitivity, 82% specificity) (Shumway-Cook, 1997)
- Score of < 40 on BBS associated with almost 100% fall risk (Shumway-Cook, 1997) (n = 44, mean age = 74.6 (5.4) years for non-fallers, 77.6 (7.8) for fallers)<sup>2</sup>

### MINIMAL DETECTABLE CHANGE:

"A change of 4 points is needed to be 95% confident that true change has occurred if a patient scores within 45-56 initially, 5 points if they score within 35-44, 7 points if they score within 25-34 and, finally, 5 points if their initial score is within 0-24 on the Berg Balance Scale."<sup>3</sup>

### NORMS:

**Table 4. Berg Balance Scale Scores: Means, Standard Deviations, and Confidence Intervals by Age, Gender, and Use of Assistive Device**

AGE (Y)	GROUP	N	MEAN	SD	CI
60 – 69	Male	1	51.0	—	35.3 – 66.7
	Female	5	54.6	0.5	47.6 – 61.6
	Overall	6	54.0	1.5	54.4 – 55.6
70 – 79	Male	9	53.9	1.5	48.7 – 59.1
	Female	10	51.6	2.6	46.6 – 56.6
	Overall	19	52.7	2.4	51.5 – 53.8
80 – 89	Male	10	41.8	12.2	36.8 – 46.8
	Female	24	42.1	8.0	38.9 – 45.3
	Overall	24	46.3	4.2	44.1 – 48.5
	No Device	10	31.7	10.0	28.3 – 35.1
	Overall	34	42.0	9.2	38.8 – 45.3
90 – 101	Male	2	40.0	1.4	28.9 – 51.1
	Female	15	36.9	9.7	32.8 – 40.9
	Overall	7	45	4.2	40.9 – 49.1
	No Device	10	31.8	7.6	28.4 – 35.2
	Overall	17	37.2	9.1	32.5 – 41.9

Lusardi, M.M. (2004). Functional Performance in Community Living Older Adults. Journal of Geriatric Physical Therapy, 26 (3), 14-22.

1 Berg K, Wood-Dauphinee S, Williams JI, Maki, B (1992). Measuring balance in the elderly: validation of an instrument. Can. J. Pub. Health July/August supplement 2:S7-11  
 2 Shumway-Cook, A., Baldwin, M., et al. (1997). Predicting the probability for falls in community-dwelling older adults. Physical Therapy 77(8): 812-819 z Retrieved 10-5-2014 from Rehab Measures Database. <http://www.rehabmeasures.org/Lists/RehabMeasures/PrintView.aspx?ID=888>  
 3 Donoghue D; Physiotherapy Research and Older People (PROP) group, Stokes EK. (2009). How much change is true change? The minimum detectable change of the Berg Balance Scale in elderly people. J Rehabil Med . 41(5):343-6.



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PATIENT NAME: \_\_\_\_\_

DATE: \_\_\_\_\_

ITEM	DESCRIPTION SCORE (0-4)	SCORE
1	Sitting to standing	
2	Standing unsupported	
3	Sitting unsupported	
4	Standing to sitting	
5	Transfers	
6	Standing with eyes closed	
7	Standing with feet together	
8	Reaching forward with outstretched arm	
9	Retrieving object from floor	
10	Turning to look behind	
11	Turning 360 degrees	
12	Placing alternate foot on stool	
13	Standing with one foot in front	
14	Standing on one foot	
<b>TOTAL</b>		

## GENERAL INSTRUCTIONS

When scoring, please record the lowest response category that applies for each item.

Poor judgment will adversely influence the performance and the scoring.

Please maintain your balance while attempting the tasks. You may pick which leg to stand on or how far to reach. Have someone near you and perform next to a wall if you are concerned about falling.

Don't put yourself in a situation to fall.

### 1. SITTING TO STANDING

**INSTRUCTIONS:** Please stand up. Try not to use your hand for support.

4	Able to stand without using hands and stabilize independently
3	Able to stand independently using hands
2	Able to stand using hands after several tries
1	Needs minimal aid to stand or stabilize
0	Needs moderate or maximal assist to stand

### 2. STANDING UNSUPPORTED

**INSTRUCTIONS:** Please stand for two minutes without holding on.

4	Able to stand safely for 2 minutes
3	Able to stand 2 minutes with supervision
2	Able to stand 30 seconds unsupported
1	Needs several tries to stand 30 seconds unsupported
0	Unable to stand 30 seconds unsupported

If a subject is able to stand 2 minutes unsupported, score full points for sitting unsupported. Proceed to item #4.



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### 3. SITTING WITH BACK UNSUPPORTED BUT FEET SUPPORTED ON FLOOR

**INSTRUCTIONS:** Please sit with arms folded for 2 minutes.

4	Able to sit safely and securely for 2 minutes
3	Able to sit 2 minutes under supervision
2	Able to sit 30 seconds
1	Able to sit 10 seconds
0	Unable to sit without support 10 seconds

### 5. TRANSFERS

**INSTRUCTIONS:** Arrange chair(s) for pivot transfer. Ask subject to transfer one way toward a seat with armrests and one way toward a seat without armrests. You may use two chairs (one with and one without armrests) or a bed and a chair.

4	Able to transfer safely with minor use of hands
3	Able to transfer safely definite need of hands
2	Able to transfer with verbal cuing and/or supervision
1	Needs one person to assist
0	Needs two people to assist or supervise to be safe

### 7. STANDING UNSUPPORTED WITH FEET TOGETHER

**INSTRUCTIONS:** Place your feet together and stand without holding on.

4	Able to place feet together independently and stand 1 minute safely
3	Able to place feet together independently and stand 1 minute with supervision
2	Able to place feet together independently but unable to hold for 30 seconds
1	Needs help to attain position but able to stand 15 seconds feet together
0	Needs help to attain position and unable to hold for 15 seconds

### 4. STANDING TO SITTING

**INSTRUCTIONS:** Please sit down.

4	Sits safely with minimal use of hands
3	Controls descent by using hands
2	Uses back of legs against chair to control descent
1	Sits independently but has uncontrolled descent
0	Needs assist to sit

### 6. STANDING UNSUPPORTED WITH EYES CLOSED

**INSTRUCTIONS:** Please close your eyes and stand still for 10 seconds.

4	Able to stand 10 seconds safely
3	Able to stand 10 seconds with supervision
2	Able to stand 3 seconds
1	Unable to keep eyes closed 3 seconds but stays safely
0	Needs help to keep from falling

### 8. REACHING FORWARD WITH OUTSTRETCHED ARM WHILE STANDING

**INSTRUCTIONS:** Lift arm to 90 degrees. Stretch out your fingers and reach forward as far as you can. (Examiner places a ruler at the end of fingertips when arm is at 90 degrees. Fingers should not touch the ruler while reaching forward. The recorded measure is the distance forward that the fingers reach while the subject is in the most forward lean position. When possible, ask subject to use both arms when reaching to avoid rotation of the trunk.)

4	Can reach forward confidently 25 cm (10 inches)
3	Can reach forward 12 cm (5 inches)
2	Can reach forward 5 cm (2 inches)
1	Reaches forward but needs supervision
0	Loses balance while trying/requires external support



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### 9. PICK UP OBJECT FROM THE FLOOR FROM A STANDING POSITION

**INSTRUCTIONS:** Pick up the shoe/slipper, which is placed in front of your feet.

4	Able to pick up slipper safely and easily
3	Able to pick up slipper but needs supervision
2	Unable to pick up but reaches 2-5 cm(1-2 inches) from slipper and keeps balance independently
1	Unable to pick up and needs supervision while trying
0	Unable to try/needs assist to keep from losing balance or falling

### 11. TURN 360 DEGREES

**INSTRUCTIONS:** Turn completely around in a full circle. Pause. Then turn a full circle in the other direction.

4	Able to turn 360 degrees safely in 4 seconds or less
3	Able to turn 360 degrees safely one side only 4 seconds or less
2	Turn 360 degrees safely but slowly
1	Needs close supervision or verbal cuing
0	Needs assistance while turning

### 13. STANDING UNSUPPORTED ONE FOOT IN FRONT

**INSTRUCTIONS:** Place one foot directly in front of the other. If you feel that you cannot place your foot directly in front, try to step far enough ahead that the heel of your forward foot is ahead of the toes of the other foot. (To score 3 points, the length of the step should exceed the length of the other foot and the width of the stance should approximate the subject's normal stride width.)

4	Able to place foot tandem independently and hold 30 seconds
3	Able to place foot ahead independently and hold 30 seconds
2	Able to take small step independently and hold 30 seconds
1	Needs help to step but can hold 15 seconds
0	Loses balance while stepping or standing

### 10. TURNING TO LOOK BEHIND OVER LEFT AND RIGHT SHOULDERS WHILE STANDING

**INSTRUCTIONS:** Turn to look directly behind you over toward the left shoulder. Repeat to the right. Examiner may pick an object to look at directly behind the subject to encourage a better twist turn.

4	Looks behind from both sides and weight shifts well
3	Looks behind one side only other side shows less weight shift
2	Turns sideways only but maintains balance
1	Needs supervision when turning
0	Needs assist to keep from losing balance or falling

### 12. PLACE ALTERNATE FOOT ON STEP OR STOOL WHILE STANDING UNSUPPORTED

**INSTRUCTION:** Place each foot alternately on the step/stool. Continue until each foot has touch the step/stool four times.

4	Able to stand independently and safely and complete 8 steps in 20 seconds
3	Able to stand independently and complete 8 steps in > 20 seconds
2	Able to complete 4 steps without aid with supervision
1	Able to complete > 2 steps needs minimal assist
0	Needs assistance to keep from falling/unable to try

### 14. TURNING TO LOOK BEHIND OVER LEFT AND RIGHT SHOULDERS WHILE STANDING

**INSTRUCTIONS:** Turn completely around in a full circle. Pause. Then turn a full circle in the other direction.

4	Able to turn 360 degrees safely in 4 seconds or less
3	Able to turn 360 degrees safely one side only 4 seconds or less
2	Able to turn 360 degrees safely but slowly
1	Needs close supervision or verbal cuing
0	Needs assistance while turning

**TOTAL SCORE (Maximum = 56)**