

Balance Error Scoring System (BESS) Test

Patient information

Name: _____ Age: _____ Date: _____

Purpose

The balance error scoring system (BESS) is a brief, easily administered test of static balance. It is used to assess balance in athletes, particularly following concussion or mild traumatic brain injury, and can assist clinicians in making return-to-play decisions.

Equipment needed

- Foam pad
- Stopwatch
- An assistant to act as a spotter

Time required

Approximately 10 minutes

Test procedure

1. Instruct the subject to remove their shoes and stand in the designated testing area.
2. Explain the testing positions and the scoring criteria to the subject.
3. Perform the following positions on both firm and foam surfaces:
 - **Double leg stance:**
Stand with feet together, hands on hips, and eyes closed.
 - **Single leg stance:**
Stand on the non-dominant foot with the dominant leg held in approximately 30° hip flexion and 45° knee flexion.
 - **Tandem stance:**
Stand heel-to-toe with the non-dominant foot in the back.
4. Record the number of errors made during each 20-second trial for each position and surface. Errors include:
 - Moving hands off hips
 - Opening eyes
 - Step, stumble, or fall
 - Abduction or flexion of the hip beyond 30 degrees
 - Lifting forefoot or heel off the testing surface
 - Remaining out of the proper testing position for more than 5 seconds
5. Begin counting errors only after the individual has assumed the proper testing position. If multiple errors occur at the same time, only one is counted. The maximum number of errors for a single condition is 10. The total score is the sum of all errors across the six trials, with a maximum possible score of 60. Lower scores indicate better balance and fewer errors.

Results

No. of errors	Firm surface	Foam surface
Double leg stance		
Single leg stance		
Tandem stance		
Total scores		
BESS total		

Normative data

Age	Broadly normal	Below average	Poor	Very poor
20–29	8–14	15–17	18–23	24+
30–39	8–15	16–18	19–26	27+
40–49	9–16	17–20	21–28	29+
50–54	9–18	19–24	25–33	34+
55–59	11–20	21–28	29–35	36+
60–64	13–22	23–28	29–40	41+
65–69	16–24	25–32	33–38	39+

Additional notes

Healthcare professional information

Name: _____

Signature:  _____

Date: _____

References

Bell, D. R., Guskiewicz, K. M., Clark, M. A., & Padua, D. A. (2011). Systematic review of the balance error scoring system. *Sports Health*, 3(3), 287–295. <https://doi.org/10.1177/1941738111403122>

Iverson, G. L., & Koehle, M. S. (2013). Normative data for the balance error scoring system in adults. *Rehabilitation Research and Practice*, 2013, 1–5. <https://doi.org/10.1155/2013/846418>