



## Standing Balance Guidelines and Tasks

**Directions:** Using the information collected from your evaluation and the activities described in each standing balance level below, determine which level of activity is most appropriate as a starting point for your patient. Once the level of balance has been decided, please involve the patient in the selection of 4 activities that they would like to practice within the chosen level. Dual task activities in level 5 can be modified to best fit the patient's goals. Tasks are completed in 2 sets of 10 repetitions each..

**Criteria for progression to the next level of activities:** Ability to demonstrate correct form of the exercise for at least 8 of the 10 repetitions with all 4 tasks. If a patient is able to complete 8/10 reps of an individual task, please D/C the successful task to their home program. Then, select another task in place of the successfully completed task from the same category until all 4 tasks have an 8/10 success rate.

**Maintenance:** Eventually, all patients will reach a true plateau. After following the action plans outlined in the General Guidelines, if a patient has still made no progress in 2 weeks, they will be considered to have reached a true plateau. A plateau is defined as no progress for 2 weeks at an exercise level. At this time the patient should be discharged to a HEP. Patients are instructed to continue performing the balance exercises at the level prescribed at the final treatment session in their HEP.

**Definition of correct form:** Center of mass should be in base of support and no greater than 2 stepping/grasping responses in one set.

Normal stance: shoulder width apart

Narrow Base of Support (NBOS) standing activities to be completed in 1 minute reps.

Walking tasks to be completed in a 20 foot distance.

Single Limb Support (SLS) activities to be completed in 20 second reps.

Tandem static stance activities to be completed in 30 second reps.

Toe taps to be completed at least 8 times in 20 seconds

Forward reach to be completed with goal of  $\geq 10$  inches

### Level 1

1. Toe stand with both hands
2. NBOS with both hands
3. Tandem stance with both hands
4. One legged stance with both hands
5. Hip Circles with both hands
6. A/P Weight Shift with both hands
7. M/L Weight Shift with both hands
8. Side-step both hands
9. Marches both hands
10. Heel stand both hands
11. Toe taps on steps with both hands
12. Sit  $\rightarrow$  stands with both hands



## Level 2

1. Toe stand one hand
2. NBOS with one hand
3. Tandem stance with one hand
4. One legged stance with one hand
5. Side step with one hand
6. Hip circles with one hand
7. A/P Weight Shifts with one hand
8. M/L Weight Shifts with one hand
9. Normal stance level surface with head turns
10. Marches with one hand
11. Heel stand one hand
12. Toe taps on steps with one hand
13. Step ups with both hands
14. Standing trunk turn normal stance
15. Forward reaching
16. Sit→stands with one hand

## Level 3

1. Toe stand no hands
2. NBOS no hands
3. Tandem stance no hands
4. One legged stance no hands
5. Side steps no hands
6. Hip circles with no hands
7. A/P Weight Shifts no hands
8. M/L Weight Shifts no hands
9. NBOS level surface stance with head turns
10. Marches no hands
11. Heel stand no hands
12. Step ups with one hand
13. Standing trunk turn NBOS
14. Leg cross no hands
15. Leg swing no hands
16. Foam normal stance A/P perts
17. Foam normal stance M/L perts
18. Foam normal stance with head turns
19. Rockerboard double leg
20. Rollerboard double leg min force
21. Standing Bolster Roll LE stop
22. Toe taps on steps with no hands
23. Sit→stands no hands high chair



## Level 4

1. Toe stands no hands eyes closed
2. Foam NBOS no hands
3. One-legged toe stand no hands
4. Standing arm/leg march
5. Crossover walk
6. Tandem walk
7. Heel-toe walk
8. Forward walking eyes closed
9. Foam single leg stance
10. Foam NBOS A/P Perts
11. Foam NBOS M/L perts
12. Foam NBOS head turns
13. Marches on foam no hands
14. Rockerboard A/P perts double leg
15. Rockerboard M/L perts double leg
16. Rollerboard double leg mod force
17. Backward walking
18. Step ups with no hand
19. Standing trunk turn NBOS
20. Sit → stands low chair/mat

## Level 5

1. One-legged stance on foam while saying the alphabet backwards
2. Rockerboard A/P perts single leg while talking about a topic ("tell me about...")
3. Rockerboard M/L perts single leg while rhyming words
4. Rollerboard double leg max force while reciting national anthem
5. Crossover walk while naming animals
6. Tandem walk while carrying water
7. Carioca Walk while holding a bag
8. Stepping over objects while walking
9. Side-stepping with ball toss
10. Cone weave forwards/sideways while carrying glass of water
11. Forward walking with head turns to identify/name targets
12. Heel-toe walk while counting by 2's
13. Backward Walking with ball toss
14. Step ups with reaching for object
15. Standing trunk turn NBOS with ball catch
16. Stepping in different directions (4 square step)



References:

- Koch M, Gottschalk M, Baker DI, Palumbo S, Tinetti ME. *An impairment and disability assessment and treatment protocol for community living elderly persons*. Physical Therapy. 1994; 74(4): 286-294.
- Mansfield A, Peters AL, Liu BA, Maki BE. *A perturbation-based balance training program for older adults: study protocol for a randomised controlled trial*. BMC Geriatrics. 2007; 7(12):1-14.
- Mansfield A, Peters AL, Liu BA, Maki BE. *Effect of a perturbation-based balance training program on compensatory stepping and grasping reactions in older adults: a randomized controlled trial*. Physical Therapy. 2010; 90(4): 476-491.