

Balancing Act: An Upright Approach to Falls

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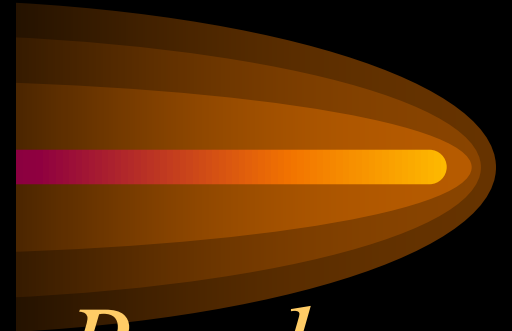
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✓ *Objectives*



1. Know the definition of a fall and falls information related to older adults.
2. Learn about various falls assessments and how to conduct them.
3. Access resources about falls prevention programs; evidenced based vs. evidence informed; group vs. individual programs.



*Romberg
Test-
Starting
Point*

Falls and HC Costs

Adults 65 Yrs and older

- Falls among adults age 65 and older are very costly.
- Each year about \$50 billion is spent on medical **costs** related to non-fatal **fall injuries**
- \$754 million is spent related to fatal **falls**
- CDC 2020



FALLS

- A fall is when a person comes to rest inadvertently (unplanned) on the ground or floor or other lower level.

Functional Fitness Concept



- To train and develop the body to make the performance of everyday activities easier, smoother, safer and more efficient.
- Focus = Training the core (torso, hips, and thighs) for stability
 - Associated with movements used in everyday life.

Fall Causes

Factors

- Poor nutrition (lack of or inappropriate foods)
- Chronic disease, disability or chronic pain
 - Limiting mobility, strength or flexibility
- Fatigue, lack of energy
- Muscle weakness
- Medication side effects (fatigue, dizziness, lack of alertness)
- Reflexes slow to respond
- Fear of injury
- Vision and/or hearing impairments
- **Unsteady gait or balance problems**

Falls From Decreased Activity

- **Decrease in Physical Activity/Function Fitness**
(COVID or Any Reason)
 - Sedentary Activities
 - Relying on driving
- **Lost Concept of Time.... Is it Aging??**
~Internalization of Ageist Messages
- **Practitioner/Provider Issue...**
 - “Take it easy”



Fall Causes: Postural Control

➤ Environmental

- Rugs, electrical cords, poor lighting, pets

➤ Changing positions

- Moving from a chair to walking
- Getting up from the toilet

➤ Normal activities

- Walking, Gardening, Skiing

SEQUELAE OF FALLS

Associated with:

- Decline in functional status
 - Nursing home placement
 - Increased use of medical services
 - Fear of falling
- 50% who fall are unable to get up without help (“long lie”)
 - A “long lie” predicts lasting functional decline

There is hope!

- The more a person moves the better... especially if a person has arthritis
- Functional Fitness is part of everyday activities – increasing those activities helps
- Move during each TV commercial or if sedentary, every hour on the hour for 10 minutes
- There are so many Fitness and Falls resources on the internet!

Falls Assessments

- Timed Get Up and Go (TUG)
- Tinetti Gait and Balance
- Berg Balance Scale

Timed Up and Go (TUG)

GOOGLE: Timed Up and Go Test

- Used to assess mobility, walking speed, and dynamic balance.
- Takes less than 3 minutes to administer.
- Equipment needed: a standard armchair, stopwatch, and a clear 10 foot walking path with a line at the turning point (9.8 feet).

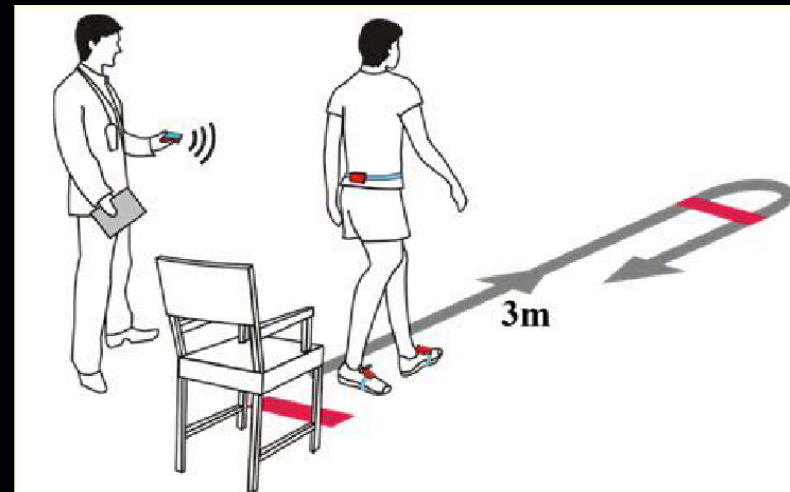
Results: Normal values are age-specific with walking speed decreasing with age.

60-69 years: 8 seconds

70-79 years: 9 seconds

80-89 years: 11 seconds

Greater or equal to 14 seconds represents increased fall risk



Tinetti Gait & Balance

GOOGLE: Tinetti Gait and Balance Assessment

- The oldest clinical balance assessment tool and widest used among older adult population.
- Measures both gait and balance (score is based on a person's ability to perform tasks given).
- Takes 10-15 minute to complete.
- Equipment needed: firm armless chair, stopwatch, 15 feet of walking space.

Score Indication: highest possible between both gait and balance is **28**

- Scores equal to or less than 18 → high fall risk
- Scores between 19 and 23 → moderate fall risk
- Scores 24 and above → low fall risk

Berg Balance Assessment

GOOGLE: Berg Balance Assessment

- Measures a person's static and dynamic balance abilities during 14 predetermined tasks.
- Detailed baseline measure.
- Takes 15-20 minutes to complete.
- Equipment needed: Ruler, two standard chairs (one with arm rests, one without), footstool or step, stopwatch, and 15 feet of walking space.

Score Indication:

41-56 = Independent, low risk of falling

21-40 = Walking with assistance, medium risk of falling

0-20 = Wheelchair bound, higher risk of falling

Less than 45 = individuals may be at greater risk of falling

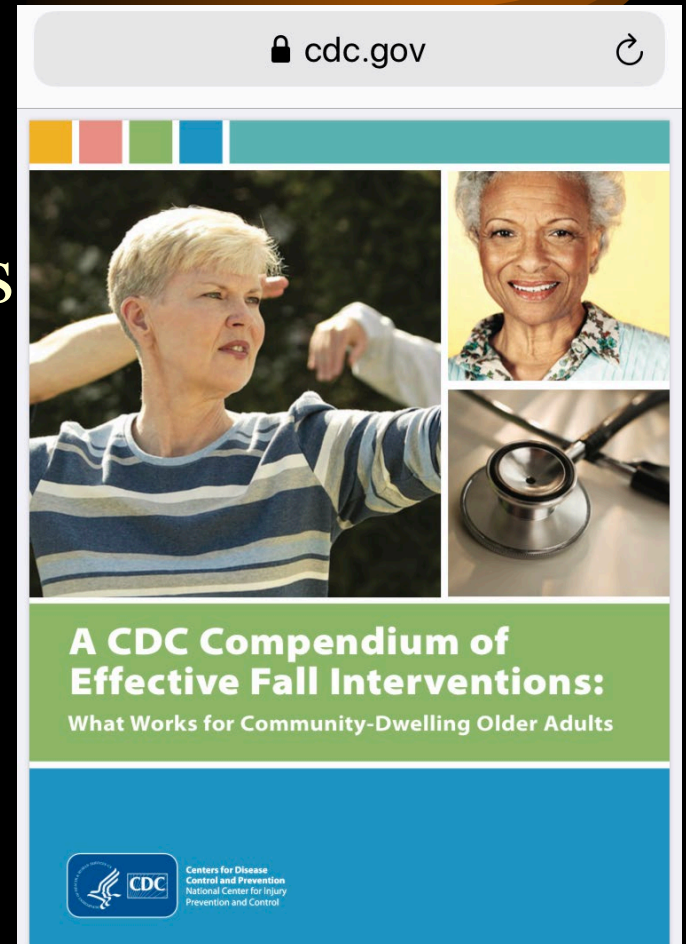
GOOGLE:

Falls Efficacy Scale

		Not at all concerned 1	Somewhat concerned 2	Fairly concerned 3	Very concerned 4
1	Cleaning the house (e.g. sweep, vacuum, dust)				
2	Getting dressed or undressed				
3	Preparing simple meals				
4	Taking a bath or shower				
5	Going to the shop				
6	Getting in or out of a chair				
7	Going up or down stairs				
8	Walking around in the neighborhood				
9	Reaching for something above your head or on the ground				
10	Going to answer the telephone before it stops ringing				
11	Walking on a slippery surface (e.g. wet or icy)				
12	Visiting a friend or relative				
13	Walking in a place with crowds				
14	Walking on an uneven surface (e.g. rocky ground, poorly maintained pavement)				
15	Walking up or down a slope				
16	Going out to a social event (e.g. religious service, family gathering, or club meeting)				
	Sub Total				
TOTAL					64

Evidence based vs Evidence Informed

- CDC Compendium of Effective Fall Interventions: What Works for Community-Dwelling Older Adults, 3rd Edition
 - **GOOGLE**: CDC Falls Compendium
- Matter of Balance
- U-ExCEL Balancing Act



Balancing Act

- **GOOGLE:** UNE COM U-EXCEL
- Free Videos for beginner, intermediate, advance exercises
- Free Balancing Act Manuals
 - Large Print Font (ME Ctr for the Blind and Visually Impaired)
 - General Manual with Provider Information

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Balancing Act

BA EXERCISES:

Beginner

Intermediate

Advanced

Advanced Action



Hand Positions

Hand Position #1: Both hands hold onto a stable surface. This provides the most stability with the greatest point of contact.

Hand Position #2: Finger tips of both hands rest on a stable surface. Provides some stability but has less point of contact.

Hand Position #3: Both hands hover a few inches above a stable surface. Provides no point of contact from hands, so the body works to stay balanced.

Start Position



- Stand facing the stable object
- Hands holding on –or ready to hold on
- Stand with back straight, in line with shoulders, knees relaxed
- Feet at comfortable stance
- Weight even on both feet

Feet Hip Width

Beginner

Foot Forward (feet flat)

Beginner

Heel Forward

Intermediate



Toe Back

Intermediate



Heel to Toe (touching)

Advanced

Foot Back

Advanced



Heel to Toe Walk

Advanced Action

Thank You!

Questions?