

# Risk Factors for Falling

## Extrinsic Risk Factors

Home	Outdoor	Activity-Related
Throw rugs	Irregular/raised sidewalks	Unfamiliar environments
Cords/wires	Ice/snow/wet leaves	Hazardous activities
Slippery floors	Uneven surfaces	Improper walking aids
Clutter	Absent/poorly secured hand rails	Improper footwear
Glare		
Absence of Lights		

## Intrinsic Risk Factors

Medications/Alcohol	Sensory	Mental Status	Gait/Balance Strength
Hypnotics	Visual impairments	Cognitive impairment	Walking speed
Sedatives	Lower extremity sensory perception	Depression	Postural sway
Antipsychotics	Vestibular Impairments	Poor judgement	Strength
Antidepressants		Improper footwear	Impaired reflexes
Cardiac drugs			
Diuretics			
Anti-hypertensives			

According to the National Council on Aging, every 15 seconds, an older adult is seen in the ER for a fall-related injury. Here's what you can do to prevent a fall...

- 1) Find a good balance & exercise program
- 2) Talk w/ your health care provider
- 3) Get regular medication reviews
- 4) Get your vision & hearing checked annually & update your eyeglasses
- 5) Keep your home safe
- 6) Talk to family members

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# Balance Training

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## WHY?

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- reduce risk of falling
- maintain independence
- gain comfort with mobility
- reduce medical expenses resulting from falls
- increase self-confidence in social situations
- increase physical ability

## WHEN?

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- Balance training can be done every day
- 10-15 minutes (or longer!)

## HOW?

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- Practice what will translate into your daily life (dancing, stepping, carrying, etc)
- Progress SLOWLY
  - o Exercises should be doable, but should be a challenging success
  - o Once you've mastered something, make it a little harder
- Specific balance exercises, Tai Chi, stability ball, Bosu ball, Aeromat, and other equipment

## 4 Goals of Balance Training

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- 1. Control your center of gravity—voluntarily and involuntarily**

Find your body's balance: sitting with one or two stabilizing feet, standing on one or two feet, walking, sitting or standing with upper body motion, walking while carrying. Have a friend lightly nudge you during balance training to practice unpredictable situations.
- 2. Target specific components of your balance system**

Somatosensory (muscles and skin), visual (eyes), and vestibular (inner ear) systems all contribute to the balance system. Training these systems separately will improve them individually thus improving your overall balance system.
- 3. Focus on the varying methods to re-establish your base of support**

Using your ankles as a pivot, hips as a pivot, or taking a step are all methods of re-establishing your base of support when balance is compromised. Practicing these three methods will help you re-establish your base of support in real-world situations.
- 4. Develop a flexible and adaptable gait pattern**

The varying environments of life require varying walking patterns and adaptability. Practicing different walking patterns, and walking on different and varying surfaces will prepare you for real-world environments.

*(\*\*see examples of exercises for each of the four goals on the back of this page)*

## 1. Control of Center of Gravity



Find and hold your balance in various positions: sitting, standing, one foot, two feet, arms by side, arms out wide, crossed arms, holding an object, slowly walking, etc. Have a friend gently nudge you so you can practice regaining balance after an unexpected loss of balance.

## 2. Target Specific Components of Balance System



**Vestibular System:** sit or stand on a non-sturdy surface with closed or busy eyes.

**Somatosensory System:** stand on a firm, broad surface with closed or busy eyes. Once mastered, try tilting your head.

**Visual System:** keep your eyes on a target; sit or stand on a non-sturdy surface. Once mastered try tilting your head.

## 3. Re-Establish Your Base of Support

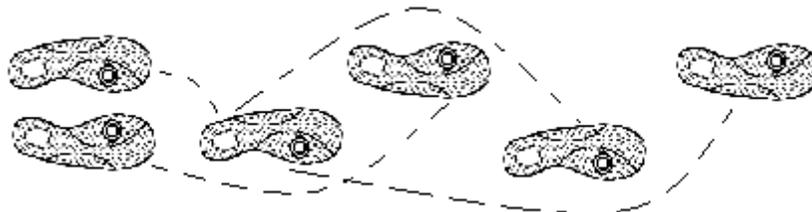


**ANKLE:** practice leaning using your ankles as a pivot point. Small, slow movement.

**HIP:** practice leaning using your hips as a pivot point. Standing on a half-foam roller will help facilitate this movement.

**STEP:** lean until you exceed your limit of stability so you are forced to take a step to regain balance.

## 4. Develop a Flexible and Adaptable Gait Pattern



Practice walking in various patterns: toes only, heels only, braid, backwards, wide step, long step, side step, high knees, stepping over objects, carrying objects while stepping, etc.