



PREVENTING FALLS *in the elderly*

Quick Facts

- The risk of falling increases with age and is greater for women than for men
- Two-thirds of those who experience a fall will fall again within six months
- A decrease in bone density contributes to falls and resultant injuries
- Failure to exercise regularly results in poor muscle tone, decreased strength, and loss of bone mass and flexibility
- At least one-third of all falls in the elderly involve environmental hazards in the home

Discussed below are 5 key risk factors of falls among older adults along with prevention tips:

Factor #1: Osteoporosis

Osteoporosis is a condition wherein bones become more porous, less resistant to stress, and more prone to fractures. Caused by hormonal changes, calcium and vitamin D deficiency, and a decrease in physical activity, osteoporosis is a chief cause of fractures in older adults, especially among women.

- Eat or drink sufficient calcium. Postmenopausal women need 1,500 mg of calcium daily. Calcium-rich foods include milk, yogurt, cheese, fish and shellfish, selected vegetables such as broccoli, soybeans, collards and turnip greens, tofu and almonds.
- Get sufficient vitamin D in order to enhance the absorption of calcium into the bloodstream. Vitamin D is formed naturally in the body after exposure to sunlight, but some older adults may need a supplement.
- Regularly do weight-bearing exercises.

Factor #2: Lack of Physical Activity

Failure to exercise regularly results in poor muscle tone, decreased strength, and loss of bone mass and flexibility. All contribute to falls and the severity of injury due to falls.

- Engage regularly (e.g., every other day for about 15 minutes daily) in exercise designed to increase muscle and bone strength, and to improve balance and flexibility. Many people enjoy walking and swimming.
- Undertake daily activities in a safe manner, such as reaching and bending properly, taking time to recover balance when rising from a chair or bed, learning the proper way to fall, and learning how to recover after a fall.
- Wear proper fitting, supportive shoes with low heels or rubber soles.

Factor #3: Impaired Vision

Cataracts and glaucoma alter older people's depth perception, visual acuity, peripheral vision and susceptibility to glare. These limitations hinder their ability to safely negotiate their environment, whether it be in their own home or in a shopping mall. Young people use visual cues to perceive an imminent fall and take corrective action. Older adults with visual impairments do not have this advantage to the same extent.

- Have regular checkups by an ophthalmologist
- Use color and contrast to define balance-aiding objects in the home (e.g., grab bars & handrails).

- Add contrasting color strips to first and last steps to identify change of level.
- Clean eye glasses often to improve visibility.

Factor #4: Medications

Sedatives, anti-depressants, and anti-psychotic drugs can contribute to falls by reducing mental alertness, worsening balance and gait, and causing drops in systolic blood pressure while standing. Additionally, people taking multiple medications are at greater risk of falling.

- Know the common side effects of all medications taken.
- Talk with your physician or pharmacist about ways to reduce your chances of falling by using the lowest effective dosage, regularly assessing the need for continued medication, and the need for walking aids while taking medications that affect balance.
- Remove all out-of-date medications and those no longer in use.
- Have a physician or pharmacist conduct a "brown bag" medicine review of all current medications.
- Limit intake of alcohol as it may interact with medications.



Factor #5: Environmental Hazards

At least one-third of all falls in the elderly involve environmental hazards in the home. The most common hazard for falls is tripping over objects on the floor. Other factors include poor lighting, loose rugs, lack of grab bars or poorly located/mounted grab bars, and unsteady furniture.

outdoors

- Repair cracks and abrupt edges of sidewalks and driveways.
- Install handrails on stairs and steps.
- Remove high doorway thresholds
- Trim shrubbery along the pathway to the home.
- Keep walk areas clear of clutter, rocks and tools.
- Keep walk areas clear of snow and ice.
- Install adequate lighting by doorways and along walkways leading to doors.

living, dining & family rooms

- Keep electrical and telephone cords out of the way.
- Arrange furniture so that you can easily move around it (especially low coffee tables).
- Make sure chairs and couches are easy to get in and out of.
- Remove caster wheels from furniture.

all living spaces

- Use a change in color to denote changes in surface types or levels.
- Secure rugs with nonskid tape as well as carpet edges.
- Remove oversized furniture and objects.
- Have at least one phone extension in each level of the home and post emergency numbers at each phone.
- Add electrical outlets.
- Check lighting for adequate illumination and glare control.
- Maintain nightlights or motion-sensitive lighting throughout home.
- Use contrast in paint, furniture and carpet colors.
- Install electronic emergency response system if needed.
- Avoid throw rugs.

kitchen

- Keep commonly used items within easy reach.
- Use a sturdy step stool when you need something from a high shelf.
- Make sure appliance cords are out of the way.
- Avoid using floor polish or wax in order to reduce slick surfaces.

bedroom

- Put in a bedside light with a switch that is easy to turn on and off (or a touch lamp).
- Have a nightlight.
- Locate telephone within reach of bed.
- Adjust height of bed to make it easy to get in and out of.
- Have a firm chair, with arms, to sit and dress.

bathrooms

- Install grab bars on walls around the tub and beside the toilet, strong enough to hold your weight.
- Add nonskid mats or appliques to bathtubs.
- Mount liquid soap dispenser on the bathtub-wall.
- Install a portable, hand-held shower head.
- Add a padded bath or shower seat.
- Install a raised toilet seat if needed.
- Use nonskid mats or carpet on floor surfaces that may get wet.

stairways, hallways and pathways

- Keep free of clutter.
- Make sure carpet is secured and get rid of throw rugs.
- Install tightly fastened hand rails running the entire length and along both sides of stairs.
- Handrails should be 34 inches high and have a diameter of about 1.5 inches.
- Apply brightly colored tape to the face of the steps to make them more visible.
- Optimal stair dimensions are 7.2 inch riser heights with either an 11 or 12 inch tread width.
- Have adequate lighting in stairways, hallways and pathways, with light switches placed at each end.

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