

Guidelines for Preventing Falls

Falls can happen anytime and anywhere to people of any age. However, as people get older, the number of falls and the severity of injury resulting from falls increases. According to the Centers for Disease Control and Prevention (CDC), falls are the leading cause of fatal and nonfatal injuries in people age 65 and older. Common injuries due to falls are head injuries, shoulder and forearm fractures, spine fractures, pelvic fractures, and hip fractures.

There is a pattern to falls among the elderly: First comes the fear of falling, then the injury, followed by hospitalization, decreased independence and mobility and, often, relocation to a nursing or residential institution.

A fall can be a major life-changing event that robs an elderly person of his or her independence. Fortunately, many falls can be prevented with healthy lifestyle choices and safety modifications in the home.

Facts about Falls and the Elderly

- Each year, more than one in four adults age 65 and older falls.
- In 2015, falls among older adults cost the U.S. healthcare system almost \$50 billion.
- More than 95% of hip fractures are caused by falling. About three-quarters of all hip fractures occur in women.
- The majority of hip fracture patients will not make a full recovery. Many will require nursing home admission or be dependent upon a cane or a walker. Some hip fracture patients will die within one year of the fall.

Causes

Many things can put you at higher risk for a fall, such as certain medical conditions or poor dietary habits.

Medical Risk Factors

- Impaired musculoskeletal function, gait abnormality and osteoporosis
- Cardiac arrhythmias (irregular heartbeat), blood pressure fluctuation
- Depression, Alzheimer's disease and senility

- Arthritis, hip weakness and imbalance
- Neurologic conditions, stroke, Parkinson's disease, multiple sclerosis
- Urinary and bladder dysfunction
- Vision or hearing loss
- Cancer that affects the bones
- Side effects of medications

Personal Risk Factors

- **Age.** The risk for a fall increases with age. Normal aging affects our eyesight, balance, strength, and ability to quickly react to our environments.
- **Activity.** Lack of exercise leads to decreased balance, coordination, and bone and muscle strength.
- **Habits.** Excessive alcohol intake and smoking decrease bone strength. Alcohol use can also cause unsteadiness and slow reaction times.
- **Diet.** A poor diet and not getting enough water will deplete strength and energy, and can make it hard to move and do everyday activities.

Risk Factors in the Home

- Many falls are the result of hazards like slippery or wet surfaces, poor lighting, inadequate footwear, and cluttered pathways in the home.
- Most fractures are the result of a fall in the home, usually related to everyday activities such as walking on stairs, going to the bathroom, or working in the kitchen.

Lifestyle Choices To Prevent Falls

Maintaining your health and staying physically active can help to reduce your risk for falling.

Understand Your Health and Medications

- Get an annual eye examination, and a physical that includes an evaluation for cardiac and blood pressure problems.
- Maintain a diet with adequate dietary calcium and Vitamin D.
- Do not smoke.
- Avoid excessive alcohol intake.
- Keep an up-to-date list of all medications and frequently provide it to all doctors with whom you consult.
- Check with your doctor(s) about any side effects of your medications and over-the-counter drugs, as fatigue or confusion increases your risk of falling.
- Make sure all medications are clearly labeled and stored in a well-lit area.

- Take medications on schedule with a full glass of water, unless otherwise instructed.

Exercise

- Talk to your doctor about starting an exercise program.
- If possible, participate in an exercise program that aids agility, strength, balance, and coordination. Climbing stairs, jogging, hiking, dancing, weight training and other activities can help build bone strength and slow progression of osteoporosis, a disorder that causes bones to thin and weaken.
- In addition, active pastimes, such as bicycling and gardening, also can improve health and life quality.

Footwear

- Wear properly-fitting shoes with nonskid soles. Avoid high heels.
- Tie your shoe laces.
- Use a long-handled shoehorn if you have trouble putting on your shoes.
- Never walk in your stocking feet. Replace slippers that have stretched out of shape and are too loose.

Home Modifications To Prevent Falls

Research shows that even simple safety modifications, such as those at home where most senior falls occur, can substantially cut the risk of falls and related injuries.

Bedroom

- Place a lamp, telephone, or flashlight near your bed.
- Sleep on a bed that is easy to get into and out of.
- Replace satiny sheets and comforters with products made of nonslippery material such as wool or cotton.
- Arrange clothes in your closet so that they are easy to reach.
- Install a nightlight along the route between your bedroom and the bathroom.
- Keep clutter off the bedroom floor.

Living Areas

- Arrange furniture so you have a clear pathway between rooms.
- Keep low-rise coffee tables, magazine racks, footrests, and plants out of the path of traffic.
- Install easy-access light switches at room entrances so you will not have to walk into a dark room in order to turn on the light. Glow-in-the-dark switches also may be helpful.
- Walk only in well-lighted rooms, stairs, and halls.
- Do not store boxes near doorways or in hallways.

- Remove newspapers and all clutter from pathways.
- Keep electric, appliance and telephone cords out of walkways, but do not put cords under a rug.
- Do not run extension cords across pathways; rearrange furniture.
- Secure loose area rugs with double-faced tape, tacks, or slip-resistant backing.
- Do not sit in a chair or on a sofa that is so low that it is difficult to stand up.
- Repair loose wooden floorboards right away.
- Remove door sills higher than a half inch.

Kitchen

- Remove throw rugs.
- Clean up immediately any liquids, grease, or food spilled on the floor.
- Store food, dishes, and cooking equipment within easy reach.
- Do not stand on chairs or boxes to reach upper cabinets.
- Use nonskid floor wax.

Stairs

- Keep stairs clear of packages, boxes, or clutter
- Light switches should be at the top and bottom of the stairs. Or, consider installing motion-detector lights which turn on automatically when someone walks by.
- Provide enough light to clearly see each stair and the top and bottom landings.
- Keep flashlights nearby in case of a power outage.
- Remove loose area rugs from the bottom or top of the stairs.
- Replace patterned, dark, or deep-pile carpeting with a solid color, which will show the edges of steps more clearly.
- Put non-slip treads on each bare-wood step.
- Install handrails on both sides of the stairway. Each should be 30 inches above the stairs and extend the full length of the stairs.
- Repair loose stairway carpeting or wooden boards immediately.

Bathroom

- Place a slip-resistant rug adjacent to the bathtub for safe exit and entry.
- Mount a liquid soap dispenser on the bathtub/shower wall.
- Install grab bars on the bathroom walls.
- Keep a nightlight in the bathroom.
- Use a rubber mat or place nonskid adhesive textured strips inside the tub.
- Replace glass shower enclosures with non-shattering material.
- Stabilize yourself on the toilet by using either raised seat or a special toilet seat with armrests.

- Use a sturdy, plastic seat in the bathtub if you cannot lower yourself to the floor of the tub or if you are unsteady.

What to Do If You Fall

- Do not panic. Assess the situation and determine if you are hurt.
- Slide or crawl along the floor to the nearest couch or chair and try to get up.
- If you cannot get up, call for help.
- If you are alone, slowly crawl to the telephone and call 911 or relatives.

For More Information

Prepare your home or assist a loved one by following these fall-proofing recommendations from the American Academy of Orthopaedic Surgeons and The Orthopaedic Trauma Association: [Falls Awareness and Prevention Guide](http://newsroom.aaos.org/images/9064/AAOSFallsGuideFINALPDF.pdf)(<http://newsroom.aaos.org/images/9064/AAOSFallsGuideFINALPDF.pdf>).

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