



Fall Prevention

Except for people living in perpetually sunny climates, most of us face winters of shorter days, cold temperatures, snow, and even ice. While inclement weather can be dangerous for anyone, it is a special concern for people whose bones are fragile from osteoporosis. For these people, falls increase their risk of fracturing bones in their wrists, spine, hips, or elsewhere.

In addition to fragile bones, older people, especially those in their 80s and 90s, gradually lose much of the muscle and body fat that has cushioned and protected their bones. Loss of padding in the hip area may make the hip bones more vulnerable if the person falls.

The good news is that falls can be prevented with attention to safety outdoors and in the home.

Outdoor Safety Tips

- In nasty weather, use a walker or cane for added stability
- Wear warm boots with rubber soles for added traction
- If sidewalks look slippery, walk on the grass for better traction
- In winter, carry a small bag of rock salt, kosher salt, or kitty litter in your pocket or car. You can then sprinkle the salt or kitty litter on sidewalks or streets that are slippery
- Look carefully at floor surfaces in public buildings. Many floors are made of highly polished marble or tile that can be very slippery. When these surfaces are wet, they become slick and dangerous. When floors have plastic or carpet runners in place, stay on them whenever possible

Indoor Safety Tips

- Keep all rooms free from clutter, especially on the floors
- Keep floor surfaces smooth but not slippery. When entering rooms, be aware of differences in floor levels and thresholds
- Wear supportive, low-heeled shoes even at home. Avoid walking around in socks, stockings, or scuffs
- Check that all carpets or area rugs have skidproof backing or are tacked to the floor, including carpeting on stairs
- Be sure that all stairwells are well lit and that stairs have handrails on both sides. Consider placing fluorescent tape on edges of top and bottom steps
 - For optimal safety, install grab bars on bathroom walls beside tubs, showers, and toilets. If you are unstable on your feet, consider using a plastic chair with a back and nonskid leg tips in the shower
 - Use a rubber bath mat in the shower or tub
- Keep a flashlight with fresh batteries beside your bed
- Add ceiling fixtures to rooms lit by lamps only; or hook up a lamp that is activated by a switch near the entry point into the room. Another option is to install voice- or sound-activated lamps
- Use at least 100-watt bulbs in your home

- If you must use a step stool, use a sturdy one with a handrail and wide steps for hard to reach areas. Or, reorganize work areas and storage to minimize the need for stooping or excessive reaching
- Consider purchasing a portable phone that you can take with you from room to room. It provides security because not only can you answer the phone without rushing for it, but you can also call for help should an accident occur
- Arrange with a family member or friend for daily contact. Always have at least one person who always knows where you are
- If you live alone, you may wish to contract with a monitoring company that will respond to your call 24 hours a day

Physical Changes

Interestingly, most falls occur at home in the afternoon, often because people trip while walking or slip when getting up from sitting. A fall can occur because of existing illnesses, medications, or drinking alcoholic beverages that slow your reflexes and may cause symptoms of confusion, dizziness, or disorientation.

Reflexes

Reflexes are automatic responses to stimuli in the environment. Examples include quickly slamming on your car brakes when a child runs into the street, moving out of the way quickly when something falls accidentally, or bending quickly to swat a mosquito. As you age, your reaction time slows and regaining your balance following a sudden movement may be difficult. This decreased ability to control your movements can result in a fall.

To improve body control, maintain an active lifestyle. Activity maintains muscle tone and flexibility and slows bone loss. Regular weight-bearing exercises and weight training can build and tone muscles even in very old people. Keeping up the strength in your arms and legs can go a long way to improving how

well you move. Talk to your doctor about activities that are safe and beneficial for you, keeping in mind your individual situation.

Illnesses and Medications

If you have an illness that affects your circulation, sensation, or mobility or take medications such as blood pressure pills, heart medicine, diuretics, sleeping pills, sedatives, antidepressants, muscle relaxers, or tranquilizers, you may have symptoms of confusion, dizziness, disorientation, and slowed reflexes. Ask your doctor if there is a relationship between the symptoms you are having and the medicines you are taking. Use of multiple medicines can increase your risk for falling. Never change or skip medications without first talking with your doctor.

Hearing

Changes in hearing occur as we age. If you do not hear as well as you used to, or if you are always asking those around you to repeat themselves, it is time to have a hearing test. If you have hearing loss, wear a hearing aid. Sounds around us help orient us to where we are and when we are in danger.

Vision

Vision also changes with age. Cataracts or glaucoma can develop. Your eyes need longer to adjust to changes in light and glare. Changes in depth perception or peripheral vision can decrease your ability to judge the steepness of stairs or curbs or to avoid obstacles in your path. Have regular eye exams and wear prescription glasses or contact lenses.

The best way to prevent falls, and possible fractures, is to eliminate as many of the causes of falls as possible. For more information, contact NOF for a copy of our brochure "Living With Osteoporosis."



PATIENT HANDOUT

How to reduce your risk of falls

Injuries from a fall can range from bruises and cuts to more serious problems, like a broken hip. Fortunately, most falls can be prevented. If you've fallen recently or think you might have a balance problem, tell your doctor immediately.

Am I in danger of falling?

People fall more as they get older because of changes that come with age, such as poor vision, balance problems, weak muscles, and arthritis. Cluttered, poorly lit living quarters also increase the risk. You are more likely to fall if you:

- have fallen before
- don't get much exercise and have weakness in your legs
- are unsteady when you walk
- are taking medicines that can contribute to falls, such as sedatives or antidepressants, or take 4 or more different medications
- have medical problems such as Parkinson's disease, osteoporosis, heart disease, or low blood pressure—or if you have had a stroke.

How can I protect myself at home?

You can minimize the risk of falling at home by taking these steps:

- Keep the floors free of clutter. Remove things you can easily trip over, such as throw rugs, electrical cords, piles of paper, and clothing.
- Make sure you have good lighting throughout the house, and put night lights in your bedroom, bathroom, hallways, and stairs.
- Have railings installed in the bathtub and shower and around the toilet, and use nonskid mats in the tub and shower area.
- Keep items within easy reach in the kitchen.
- Put handrails on the stairs. (Using bright paint or strips of tape on the railing will make it easier to see.)
- Wear shoes with firm, nonskid soles. Don't wear house shoes, such as flip-flops or loose slippers, or shoes with heels higher than 1 inch.

What else can I do to protect myself?

- Get your eyes checked regularly. Wear your glasses as prescribed, and clean them often to improve visibility.
- Stay active and exercise often to keep your muscles and bones strong. Ask your doctor about weight-bearing exercise, and what you can do to improve your balance.
- Eat a healthy diet, with plenty of calcium and vitamin D. Limit consumption of alcoholic beverages (have no more than 2 drinks a day).
- Take care of your feet. If they hurt, tell your doctor.
- Ask the doctor whether you need a cane or other walking aid.
- Have your doctor go over all your medicines to see if you're taking anything that can make you dizzy or sleepy.
- Get up very slowly. When you're getting out of bed, sit on the side for a few minutes before you stand up. Getting up too quickly can make you feel dizzy or lose your balance.
- If you live alone, get an emergency alert system that you can wear around your wrist or neck and press to call for help if you fall and can't reach the phone.

Where can I get more information?

American Geriatrics Society

212-308-1414

<http://www.americangeriatrics.org>

National Center for Injury Prevention and Control

770-488-1506

<http://www.cdc.gov/ncipc/falls/#PDF>

National Institute on Aging

<http://www.niapublications.org/engagepages/falls.asp>

U.S. Consumer Product Safety Commission

<http://www.cpsc.gov/CPSCPUB/PUBS/701.html>

Sources: Rao SS. *Am Fam Physician*. 2005¹; Tremblay KR, et al. Colorado State University. 2005.³⁴