

# Falling and Balance

## *What are the major causes of falls?*

The most common causes of falls include environmental hazards (such as slippery floors and loose rugs), weak muscles, unstable balance, dizziness, vision problems, and medication side effects (such as dizziness and confusion).

## *How can I tell if I am at risk for falling?*

The most important predictors of fall risk include: muscle weakness, unsteady balance, having had a prior fall in the past year, and taking certain medications. There are three contributing areas to balance: your **eyes, inner ears and joints**.



1. With the loss of vision you also lose the ability to use your eyes to orient yourself to the horizon. Now your eyes are no longer telling your brain or body what is level or where it is in relation to everything else.



2. Your inner ears help to orient your head to the upright. They let your brain know where your head is in space, if it is straight up or sideways or upside down. If your inner ear is not functioning properly you may find you are often dizzy which, of course, make balance difficult.

3. Your joints have small receptors in them which tell your brain where that joint is at any given time. When a joint is injured, its receptors may be damaged and your body must re-learn how to communicate with them. With joint replacements you lose those receptors and that ability to know where that joint is in space. Therefore, your body must use the other joints to compensate as well as your other senses.



When there is a problem with only ONE of these areas you must rely more on the other two to maintain your balance. The more areas you have limitation in, the greater your risk for falling.

## *What can I do to decrease my chances of falling?*

Ask your physical therapist or physician to evaluate your strength, balance, gait, medications and overall risk for falls. The chances are good that there will be a number of things that you can do to reduce fall risk: adjusting medications, physical therapy, starting an exercise regimen, or receiving an assistive device.

## *What can be done to improve balance?*

There are a number of exercises that can improve stability. Start with improving your posture and leg strength. Talk to your physical therapist to find out how to do that safely.

## *How can I make my home environment safer?*

As part of your fall-prevention measures, take a look around you. Installing bathroom grab bars, improving lighting in key areas, removing any hazardous conditions on the floor, and making stairways and entrance areas safer by removing clutter may all help to make your home safer.

# Falling and Balance

## Remove Home Hazards

- Remove boxes, newspapers, electric cords and phone cords from walkways
- Move coffee tables, magazine racks and plant stands from high-traffic areas
- Secure loose rugs with double-faced tape, tacks or a slip-resistant backing
- Repair loose, wooden floorboards and carpeting
- Store clothing, dishes, food and other household necessities within easy reach
- Immediately clean spilled liquids, grease or food
- Use nonskid floor wax
- Use nonskid mats in your bathtub or shower

## Light up your living space

As you get older, less light reaches the back of your eyes where you sense color and motion. So keep your home brightly lit with 100-watt bulbs or higher to avoid tripping on objects that are hard to see. Don't use bulbs that exceed the wattage rating on lamps and lighting fixtures, however, since this can present a fire hazard. Also:

- Place a lamp near your bed and within reach so you can use it if you get up at night
- Make light switches more easily accessible in rooms. Make a clear path to the switch if it isn't near the room entrance. Consider installing glow-in-the-dark or illuminated switches.
- Place night lights in your bedroom, bathroom and hallways.
- Turn on the lights before going up or down stairs. This might require installing switches at both the top and bottom of stairs.
- Store flashlights in easy-to-find places in case of power outages.

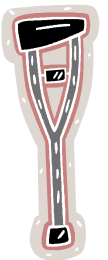
## *How can I find out if any of the medications I take may increase my risk of falling?*



Your physician and pharmacist are the best people to systematically assess the risk and benefits associated with medication(s). Be sure to tell your physician about all medications you are taking, even non-prescribed products and those prescribed by other providers.

## *What kinds of walking aids are available?*

A whole spectrum of walking aids are widely available. Any walking aid should be carefully matched to your particular needs. It must be measured to the right size and provide the optimal level of stability without creating too much dependency. When used properly, these aids can dramatically improve mobility and safety.



**Related:** See Handout on Assistive Devices