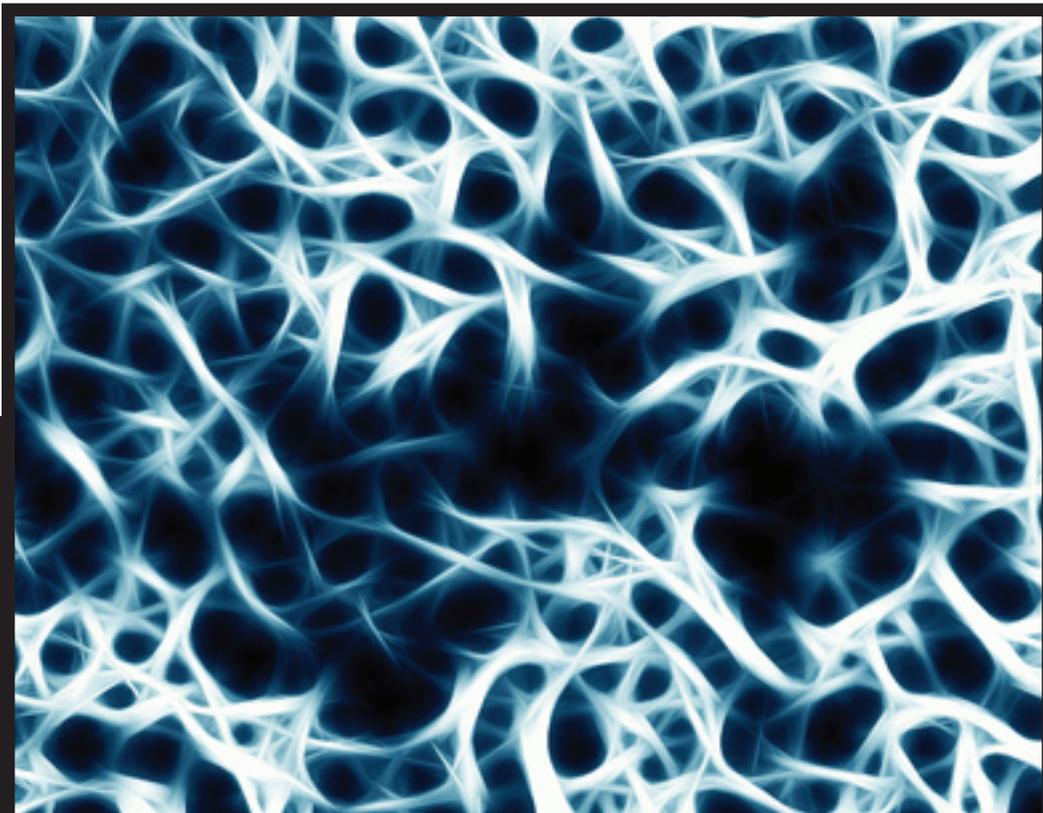


Osteoporosis &



Bone Health

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OSTEOPOROSIS AND FALL PREVENTION

BY: YOUR PHYSICAL THERAPIST

Sources: American Physical Therapy Association
Mayo Clinic
National Osteoporosis Foundation



Falls: Here Are The Facts

Falls among the elderly happen more frequently than we'd like, and when they do happen, then can be very dangerous. They can even lead to diminished ability to

perform activities and live independently. It is estimated that 1 in 3 seniors over age 65, and nearly 1 in 2 seniors over age 80, will fall at least once this year, many times with disastrous consequences.

Risk factors associated with falls:

- ✔ Conditions associated with aging
- ✔ Muscle weakness
- ✔ Difficulty with balance or walking
- ✔ Vision problems
- ✔ Pre-existing medical conditions that limit mobility, such as Parkinson disease, stroke, or diabetes
- ✔ Conditions that cause confusion (dementia, Alzheimer's, etc...)
- ✔ Being on more than four medications at the same time
- ✔ Use of an assistive walking device
- ✔ Environmental hazards (e.g., throw rugs, pets)
- ✔ Difficulty completing activities of daily living
- ✔ Low blood pressure

What happens as we age?

As we age, our bones become more fragile, and our risk of injury increases. With age also comes loss of balance, which further increases our risk of falls and fall-related injuries. If you, or a family member, have been diagnosed with osteoporosis, then you (or your loved one) face a much greater risk of fracturing a bone. To make matters worse, if you fracture a bone (and you have osteoporosis), the bone may not heal well.

The best approach to managing this serious complication of osteoporosis is doing everything you can to **avoid a fall in the first place**. That's why, it's important to take steps to make your home safer, and learn better mechanics for preventing a fall.

Getting Started On Your Fall Prevention Plan

There are tons of resources available in this day and age. Your doctor, nurse, or physical therapist can discuss fall prevention strategies with you.

Fortunately, there are many fall prevention resources available to you. Your health care professional can discuss strategies to keep you safe and lower your risk of falls. Often times, **physical therapy is recommended** to help you in this process. Your

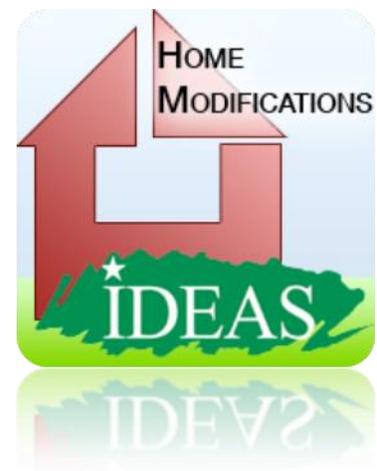
physical therapist will work closely with you to develop specific strategies to decrease your risk (even incidence) of falls in and outside your home. Certain exercises will be prescribed as appropriate to help you strengthen certain muscles and help improve your balance.

It's important that you **get a bone scan** as soon as your doctor recommends it. As soon as you find out if you have low bone mass, you need to start taking the medicine your doctor prescribes and begin an exercise regimen tailored specifically to help you build bone mass.

Home Redecorating For Fall Prevention

Fall prevention at home may be as simple as keeping floors clear and doing some minor home repairs. The following tips can help:

- ✔ Get rid of area rugs that can trip you while walking
- ✔ Clear your home of clutter
- ✔ Tie up and secure cords/wires (from your TV, phone, computer, etc.)
- ✔ Use a nightlight or flashlight when getting up in the dark
- ✔ Make sure stair rails are secure
- ✔ Make sure stairways and stoops are well lit
- ✔ Add grab bars in bathrooms near toilets and tubs to help you get up safely
- ✔ Use rubber-soled shoes and slippers with good support and traction
- ✔ Use caution when climbing a step-ladder — better yet, ask for help or avoid using one at all!
- ✔ Don't carry items that are so bulky you cannot see the path in front of you



Changing Habits of Motion

Fall prevention can mean different things for different people. For example, for those with disease of the spine who also have osteoporosis, it may mean learning new ways of moving. **In this case, sudden movements, especially those that twist the spine, should be avoided.**

If you have osteoporosis, it is also very important that you learn the right way to lift items, and avoid lifting heavy object, like those that are more than 10 lbs. When lifting any object, make sure you:

- ✔ Keep your chest lifted
- ✔ Bend your knees
- ✔ Hinge forward from the hips (and try not to round the back)
- ✔ Pull [the object] close to you to make sure the pull on the joints of your spine is minimal.

If you are not sure of the right way to lift objects, give us a call! Your therapist can teach you the right way to lift objects, with good body mechanics, that will protect your spine.

Learning new, more efficient ways of moving takes some practice, but is worth the effort in terms of safety and reduced pain. Says Shipp, “Once people are used to moving in ways that are protective, they actually realize that they don’t have discomfort in their back and they also have more energy.”

A PT can also identify any bad habits you may have when performing household chores, getting in and out of the tub, and getting up from a chair, all of which can put you at risk for injury.

Taking Smart Steps

There are many reasons other than osteoporosis that people are at greater risk of falling as they age, including poor eyesight, changes in blood pressure, and medication side effects. In addition to implementing fall prevention strategies at home, take these additional steps to increase safety:

- ✔ Get a regular vision checkup and use glasses if prescribed.
- ✔ Tell your doctor if any of your medications make you feel dizzy or confused.
- ✔ Ask for a fall evaluation or balance test if you're falling often.
- ✔ Take time to do strength training and exercises that build endurance and flexibility; as your strength and balance improve, you'll become less likely to fall.

Fall Prevention

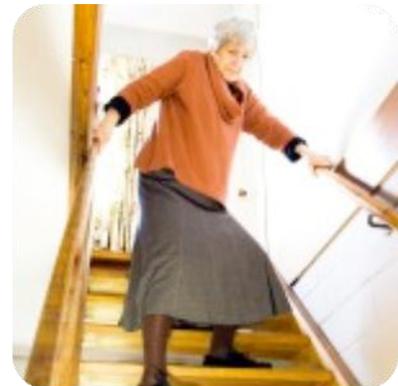
Preventing falls is a special concern for men and women with osteoporosis. Falls can increase the likelihood of fracturing a bone in the hip, wrist, spine, or other part of the skeleton. In addition to the environmental factors listed below, falls can also be caused by impaired vision and/or balance, chronic diseases that affect mental or physical functioning, and certain medications, such as sedatives and antidepressants. It is important that individuals with osteoporosis be aware of any physical changes that affect their balance or gait, and that they discuss these changes with their health care provider. Here are some tips to help eliminate the environmental factors that lead to falls.

**Outdoors:**

- ✔ Use a cane or walker for added stability.

Indoors:

- ✔ Wear rubber-soled shoes for traction.
- ✔ Walk on grass when sidewalks are slippery.
- ✔ In winter, carry salt or kitty litter to sprinkle on slippery sidewalks.
- ✔ Be careful on highly polished floors that become slippery when wet.
- ✔ Use plastic or carpet runners when possible.
- ✔ Keep rooms free of clutter, especially on floors.
- ✔ Keep floor surfaces smooth but not slippery.
- ✔ Wear supportive, low-heeled shoes even at home.
- ✔ Avoid walking in socks, stockings, or slippers.
- ✔ Be sure carpets and area rugs have skid-proof backing or tack them to the floor.
- ✔ Be sure stairwells are well lit and that stairs have handrails on both sides.
- ✔ Install grab bars on bathroom walls near tub, shower, and toilet.
- ✔ Use a rubber bath mat in shower or tub.
- ✔ Keep a flashlight with fresh batteries beside your bed.
- ✔ If using a step stool for hard-to-reach areas, use a sturdy one with a handrail and wide steps.



- ✔ Add ceiling fixtures to rooms lit by lamps.
- ✔ Consider purchasing a cordless phone so that you don't have to rush to answer the phone when it rings, or so that you can call for help if you do fall.

Maintaining Physical Activity

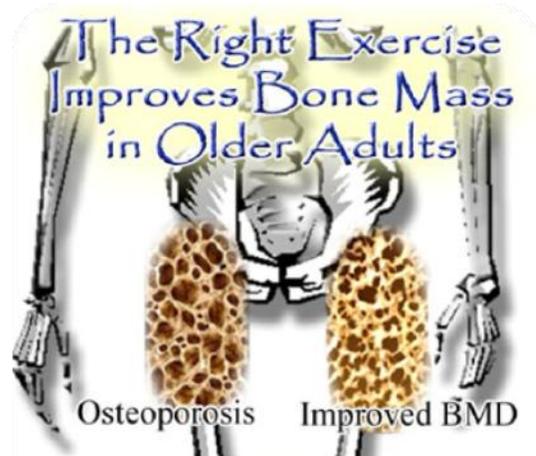
Maintaining physical activity is crucial in helping to prevent falls. Your physical therapist is a good source for you. Your current level of activity and muscle weakness along with functional limitations guide your therapist to prescribe the exact exercises that are MOST beneficial for you to gain your goals. Any combination of exercises and or activities at home might be recommended to improve your balance and movement.

Did You Know Physical Therapy Can Help PREVENT Falls?

With evaluation and development of individualized treatment plans including exercises to improve strength, mobility, and balance, therapy can be a key component to preventing falls.

Once a physical therapist has reviewed your medical history and completed a thorough examination, he or she will design an individualized program of exercises and functional activities for you. This program may focus on:

- ✔ **Strengthening** exercises geared towards muscles that are weaker to help improve your balance
- ✔ **Stretching** to increase flexibility of muscles (so you get your range back)
- ✔ **Balance** exercises *specifically* tailored to help restore your balance and decrease risk of falls
- ✔ **Coordination** exercises to help you regain your balance quicker, if you start to lose your balance at any time



Bone mineral content improved by more than 5% after short term, guided exercises. This correlates with more than a 30% decreased chance of fracture. Without exercise bone mass quickly reverted to baseline levels.

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- ✔ **Walking** activities to help reduce the need to hold onto furniture, or walls, and increase your confidence with walking to help decrease your risk of falls.

If necessary, the physical therapist will refer you to other medical professionals, such as an ophthalmologist or neurologist.

Included here for your convenience, you will find our specifically designed “Home Safety Checklist” to see the risks in and around your home, and what you can do to reduce the risks of falling.

If you have any questions, feel free to call us. Our highly experienced physical therapists are always here to help you.

HOME SAFETY CHECKLIST FOR FALL HAZARDS

This room-by-room checklist highlights possible fall hazards. If you mark “Yes” to any of these questions, consider the suggestions to help reduce your chances of falling.

Bathroom: Hazard

Possible Hazard	Yes	Suggestion
Is the path from the bedroom to the bathroom dark?		Nightlights can be helpful in lighting the way.
Are towel racks used to balance or grab onto while getting in or out of the bathtub/shower?		Towel racks may not be mounted well enough to support a person’s weight. Install grab rails in the appropriate places.
Is it difficult to stand during a shower?		A shower seat allows older adults to shower without getting tired of standing or risking a fall because of dizziness.
Is the shower floor and/or bathtub slippery?		Install non-skid strips or a non-slip mat.
Is there any water on the floor after a bath/shower? Are there leaks from the tub/ shower?		Patch leaks with caulk or other appropriate materials. Wipe up water immediately to prevent slipping. Use a bath mat with a slip resistant backing.
Is it necessary to reach far or turn around to get towels, shampoo, and soap?		Install a shower/bath storage unit that attaches to the side of the tub or shower wall to decrease reaching or turning around to get things.
Is it difficult to get on and off the toilet?		Replace the toilet with a higher toilet and/or install handrails.

Bedroom:

Possible Hazard	Yes	Suggestion
Is there a long reach from the bed to a light?		Move the lamp closer to the bed or attach a light to the headboard.
Is it necessary to get out of bed or reach far to get to the telephone?		A cordless phone within easy reach will reduce the risk of falling.
Is it necessary to get out of bed or reach far to get eyeglasses?		Store glasses within reach of the bed.
Are there ANY cords running along the floor or walkways?		Cords are a tripping hazard. Move cords so they don't cross walking paths and/or get an electrician to install additional outlets.
Is there clutter (clothes, shoes, books, etc.) on the floor?		Remove clutter from walkways to reduce the chances of tripping over it.
Is it common to get up many times during the night to use the bathroom?		Place a portable commode near the bed to eliminate nighttime trips to the bathroom.

Kitchen:

Possible Hazard	Yes	Suggestion
Are there floor mats or rugs in the kitchen?		Remove throw rugs or secure them to the floor with slip-resistant backing.
Is it necessary to reach far, bend over, or climb on a stool to get commonly-used kitchen items and foods?		Rearrange cupboards and drawers so that items used most often are waist high. Use a sturdy step stool with a grab bar to reach items stored overhead. Never use a chair as a step stool.
Is there liquid, food, grease, or other clutter on the floor?		Sweep often and wipe up liquid immediately to reduce the chances of slipping.

Living Room:

Possible Hazard	Yes	Suggestion
Do carpets, rugs, and floor coverings have frayed corners or rolled-up edges?		Remove damaged floor coverings or secure them well with double-sided tape, nails, etc. It's important to have a flat, sturdy walkway.
Are there throw rugs in walkways?		The best thing to do is to REMOVE throw rugs. Otherwise, put double-sided tape on them so they don't slip.
Are chairs and couches low to the ground?		Higher chairs and armrests are helpful for easing into a sitting position.
Is it necessary to get up to answer the phone?		Keep a phone nearby, within reach, for easy access. Cordless phones are helpful. Keep a phone close to the floor in order to call for help in the event of a fall.
Do you have to walk over or around electrical cords or wires?		Tape cords and wires to the wall or have an electrician install additional outlets.
Do you need to walk around furniture to get through the living area?		It's best to have a straight path, clear of furniture. Rearrange furniture to provide for obstacle-free walking.
Do you have to reach up to pull cords to lights or ceiling fans?		Install longer cords or link ceiling lights/fans to a light switch on the wall to eliminate the need to look and reach up.

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