

Healthy Living

Patient Information from the American Chiropractic Association

Preventing Falls Among Older Adults

Perhaps you know someone who's been injured, disabled or even killed by a fall. Or maybe you've taken a spill yourself and are afraid the next one could be worse. As we age, time takes its toll on the bodily systems that keep us balanced and standing upright. For example, you may not see or hear as well, which can affect your coordination. Nerves that carry information from your brain to your muscles may fray and deteriorate, slowing your reaction time and making it more difficult to move away from oncoming pedestrians or adjust to icy patches on a sidewalk. Normal declines in muscle strength and joint flexibility can hinder your ability to stand, walk and rise from chairs.

In 2003, more than 1.8 million seniors were treated in hospital emergency rooms for fall-related injuries and of those treated, more than 421,000 were hospitalized. You needn't let the fear of falling rule your life, however, as many falls and fall-related injuries are preventable. Through scientific studies, researchers have identified a number of modifiable risk factors that increase the likelihood of a fall, including medication side effects, loss of limb sensation, poor eyesight, tripping hazards within the home, and lack of physical activity.

The American Chiropractic Association recommends the following fall-prevention tips:

Perform a home safety check

At least one-third of all falls involve hazards within the home. Most commonly, people trip over objects on the floor. See the Home Safety Checklist and work with a family member or health care provider to evaluate your home for potential hazards and minimize your risk of injury.

Begin a regular exercise program

Consider a general exercise program that includes activities such as walking, water workouts or tai chi—a

Home Safety Checklist

All living spaces

- Remove throw rugs.
- Secure carpet edges.
- Remove low furniture & objects on the floor.
- Reduce clutter.
- Remove cords and wires on the floor.
- Check adequate lighting at night (especially along the path to the bathroom).
- Secure carpet or treads on stairs.
- Install handrails on staircases.
- Eliminate chairs that are too low to sit in and get out of easily.
- Do not wax your floors—or use nonskid wax.
- Ensure that the telephone can be reached from the floor.

Bathrooms

- Install grab bars in the bathtub/shower and by the toilet.
- Use rubber mats in the bathtub/shower.
- Take up floor mats when you aren't using the bathtub/shower to avoid tripping over them.
- Install a raised toilet seat.

Outdoors

- Repair cracked sidewalks.
- Install handrails on stairs and steps.
- Trim shrubbery along the pathway to the home.
- Install adequate lighting by doorways and along walkways leading to doors.

gentle exercise that involves slow and graceful dance-like movements. Exercise reduces your risk of falls by improving your strength, balance, coordination and flexibility.

In an experimental study published in the *Journal of Advanced Nursing*, scientists investigated the effectiveness of tai chi, an ancient Chinese martial art that helps improve balance and flexibility, in helping reduce the incidence of falls in the elderly. Patients who participated in a 12-week tai chi program, practicing Sun-style tai chi 3 times a week, significantly increased knee and ankle muscle strength and improved flexibility and mobility compared with a group that did not participate in the exercise program. Tai chi participants were almost twice less likely to experience a fall.

Review your medications

Your risk of falling may increase if you take certain prescription medications to treat age-related medical conditions. Many medications have side effects that can affect your brain function and lead to dizziness or lightheadedness. Taking multiple medications magnifies the risk, as does combining prescription drugs with alcohol, over-the-counter allergy or sleeping medications, painkillers, or cough suppressants. Ask your prescribing physician to review your medications and reduce your chances of falling by using the lowest effective dosage. Also, discuss the need for walking aids or supports while taking medications that can affect balance.

Have your vision checked

Reduced vision increases risk of falls. Age-related vision diseases, including cataracts and glaucoma, can alter your depth perception, visual acuity and susceptibility to glare. These limitations hinder your ability to move safely. It is important to have regular check-ups with your ophthalmologist. Also, regularly clean your glasses to improve visibility.

Preventing osteoporosis

Osteoporosis makes bones less resistant to stress and more likely to fracture. Caused by hormonal changes, calcium and vitamin D deficiencies, and a decrease in physical activity, osteoporosis is a chief cause of fractures in older adults, especially women.

To help limit the effects of osteoporosis, be sure to eat or drink sufficient calcium. Calcium-rich foods include milk, yogurt, cheese, fish and shellfish, broccoli, soybeans, collards and turnip greens, tofu and almonds. In addition, consume sufficient amounts of vitamin D to enhance the absorption of calcium into the bloodstream. Vitamin D is formed naturally in the body after exposure to sunlight, but older adults may need a supplement.

Falls don't have to be a part of getting older. You have the power to stay securely on your feet. A physical activity program, lifestyle changes, and home improvements may further reduce your risk. But if you do find yourself falling, take steps to reduce your risk of serious injury. If possible, fall forward on your hands or land on your buttocks—but not on your spine. Also, as you fall, protect your head from striking furniture or the floor.

If you live alone, and are afraid no one will help you if you fall, ask someone to check on you once a day. Or consider paying for an emergency-monitoring company that responds to your call for help 24 hours a day. ■

ACA American Chiropractic Association

For more information on prevention and wellness, or to find a doctor of chiropractic near you, go to the Patient Information section on ACA's Web site at www.acatoday.org or call 800-986-4636.

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