

## Fall prevention for the elderly



alls are a major cause of injury and death for elderly patients, with estimates suggesting that one in three people over the age of 65 fall each year, resulting in ankle, leg and hip fractures and dislocations as well as back and head injuries, all of which can massively reduce mobility and are potentially life threatening for older patients. Perhaps more alarming, according to the Australian Bureau of Statistics, the number of falls in people over the age of 75 has increased by 400% in the past decade. Among other medical factors that may increase the risk of a fall — such as taking multiple medications, dizziness and cognitive impairment — foot problems are a main cause of falls in the elderly and can be prevented through proper care and consultation with a podiatrist. Foot problems that can contribute to a fall include difficulty walking, arthritis and pain, with the main foot issues causing these problems being a decrease in muscle strength, toe deformity, and decreased range of motion in the joints of the foot.

With age, muscle strength diminishes, having serious effects on stability and balance. The muscles of the foot have an important role in creating stability and support as they are constantly working to support stretching ligaments and tendons. Over time, the muscles get worn down and weak, making them less able to provide your feet with the support they need for proper balance. This lack of muscle strength can sneak up on you, as once strong and capable muscles gradually weaken over time through general wear and tear, and you may suddenly notice a sense of uneasiness when getting around and more reliance on handrails for support on stairways, escalators and the like.

Diminished strength is often exacerbated as a fall risk factor by deformity in one or more toes, most often the big toe, which has a huge impact on balance. There are several conditions that contribute to deformed toes, including bunions (growths of bone and tissue on the side of the big toe), arthritis (swelling in the joints), and even less serious problems such as corns and calluses that can change the way you move, leading to deformities over time. Toes deformities can change the way you walk as you compensate for injuries and painful areas, having lasting affects on balance and stability as you are not only coping with a deformity, but are also forcing the muscles in your feet to work harder to keep you upright when moving in an unnatural way.

Range of motion in the ankle and toe joints also has huge impact on balance and stability and it's often range of motion that allows you to recover quickly from a trip on an uneven surface, both through ability to move the joint into a new position to compensate for the change in surface beneath your feet, and also to absorb shock from the force placed on your feet by the sudden change. Range of motion can be decreased as a result of conditions such as arthritis, and also through general wear and tear.

Fall prevention is possible through proper care of your feet and regular consultation with a podiatrist who will assess your risk of a fall and treat any conditions in your feet to reduce your overall risk. Your podiatrist can give you exercises to do at home that can help to maintain and improve muscle strength, stability and range of motion, and as long as it is safe for you to do so, there are activities you can get involved in to help to reduce your risk of a fall. See our list of *Top tips for preventing falls in the elderly* for more information on what your can do to reduce your risk of major injury.

## Top tips for preventing falls in the elderly

Wear properly fitted shoes: ditch the high heels, thongs or open-toed sandals and opt for shoes with a flat, sturdy sole that offer more stability, soft linings to protect delicate skin, and secure fastenings to prevent your feet falling out. Shoes with good grip are recommended when out and about in wet weather to avoid slips and falls. It's worth getting your feet properly fitted as your feet may have changed a lot since your last fitting. You may need shoes with a wider toe box to accommodate toe deformities or bunions; wider shoes will ease the pressure on toes on joints and will not only take the pressure off of those areas to lessen the chance of swelling, but will also help to relive pain through less chance of friction from tight, rubbing shoes.

Avoid walking around barefoot or in socks or slippers. As you age your feet are less sensitive and you can easily cut yourself or otherwise injure bare feet without realising. Socks and slippers can be slippery and increase the risk of falling, particularly on smooth surfaces such as wooden or tiled floors.

**Exercise:** your podiatrist can suggest exercises to help maintain or improve stability, balance and range of motion in your joints. Nothing beats a good walk for keeping joints flexible and increasing muscle strength, if you are able to get out and about a fifteen minute walk each day will really help to reduce falls — as long as walking conditions are safe, of course! Involvement in low impact sports such as Tai Chi can greatly benefit balance and range of motion and are an excellent accompaniment to exercises you can do at home.

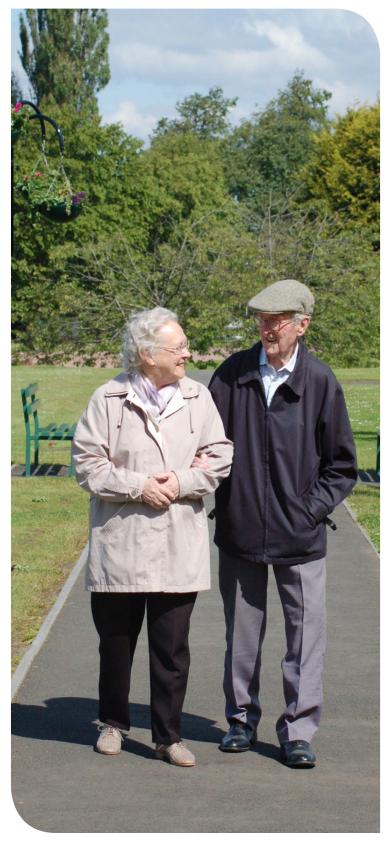
**Nail care:** nails become thicker with age and are therefore harder to trim. Decreased muscle strength and limited ability to bend down may limit your ability to look after your nails yourself. Nails can easily become ingrown and infected or cause other injuries when squished inside shoes.

If you can't trim your nails yourself be sure to ask someone else to cut them for you or see your podiatrist for help. Nails shouldn't be cut too short or close to the skin to prevent ingrown toenails.

**Keep feet clean:** Wash your feet daily in warm, soapy water and dry them carefully, being particularly careful to dry between toes. Apply some talcum powder between toes to absorb extra moisture. This will help to prevent infections. If you notice any injuries on your feet, get them treated immediately before they become serious and affect your risk of a fall.

**Check for hazards:** one of the easiest things you can do to reduce your risk of a fall is to remove the hazards of everyday life that might be lying around your home. Electrical cords, loose rugs or carpets and slippery floors can all be made safer by tidying trip hazards away, affixing rugs and carpets properly to the floor so you're less likely to trip on them and investing in some non-slip mats for slippery areas such as the bath and shower.

**Improve lighting:** make sure your home is well lit and that light switches and lamps are within easy reach without any trip hazards in the way. Good lighting will help you to see hazards before you fall, particularly important when eyesight may be diminishing.



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