# Falls prevention

Choose physio

A path to better care

## Falls

Falls can occur anywhere and at any age. However, the risk increases as we grow older and can be caused by a range of factors including:

- Loss of strength and balance
- Medical conditions
- Impaired decision-making
- A fear of falling.

After a fall, many people can lose confidence to go outside, be active or engage in social activities.

Mobility and balance are key in falls prevention, with the brain playing a crucial role —planning movements, as well as receiving information from the body senses, such as vision. The brain then sends messages to the muscles on how to respond to this information, in order to achieve safe and successful balance and mobility.

Good balance and mobility depend on the ability to activate the right muscles at the right times, with the right amount of force. A range of conditions can affect this ability.

Mobility also requires good cardiovascular (heart and circulation) and respiratory (lungs and breathing) function to ensure **enough oxygen is getting to the muscles for them to work.** 

As your balance and mobility relies on so many body systems, the natural effects of aging can result in decreased balance and mobility leading to increased risk of falls.

## Why do people fall?

As a person gets older, the risk of a fall generally increases largely due to a combination of age-related changes in the body, and social and environmental factors.

As we age, there is a natural loss of muscle fibres. The body's control system can become slower to respond to challenges in stability, resulting in reduced balance. Other conditions that impact falls include:

- Some **specific health conditions** can also increase the risk of falling. These include reduced eyesight, diabetes, infections or operations, osteoarthritis or progressive neurological conditions, such as dementia and Parkinson's disease.
- Low levels of physical activity or inadequate nutrition can contribute to muscle weakness, resulting in a reduction of leg strength. This may result in falls.
- Reduced cardiovascular fitness, associated heart or lung problems and certain medications may also contribute to an increased falls risk. It is important to chat with your GP or pharmacist if you feel your medication is contributing to falls.
- **Dizziness and vertigo** are other reasons falls and balance issues may occur, which physiotherapists can help identify the potential causes of and suggest management strategies to reduce the impact of dizziness on your balance.
- **Continence issues** can increase the risk of falling. Lack of strength, waking often at night or disorientation due to illness, may cause a person to fall whilst attempting to go to the bathroom.



1 million older Australians fall each year, and falls are the leading cause of preventable death in older people.



A physiotherapy-led exercise program in residential care reduced falls by 55%.

S.

Exercise including balance, functional activity and resistance training can **reduce falls by 34%** in people living at home



choose.physio

## How can physiotherapy help?

A physiotherapist can help you get your confidence back by assessing any strength or balance issues, in addition to providing advice and exercises to help get you back doing the social activities you have been missing. They will also work with others in your healthcare team such as your GP, nurse, podiatrist, occupational therapist, dietitian and family to help manage fall-related injuries, and **reduce risks of falling in the future at home or in residential care**.

Based on the assessment, your physiotherapist may give you certain exercises to help improve physical function and support you to engage in community activities.

Physiotherapists can also consult and provide advice about gait aids, such as walking sticks or frames, or complicated movement issues including the use of machines such as wheelchairs or mechanical hoists. A home safety assessment is also an opportunity to identify slippery or uneven floors and other home hazards that may contribute to falls risk.

Working in private practice, community health settings, hospitals and residential care, physiotherapists work with you to support your goals and aim to maximise your health and independence at any age.

## Who can I see?

There are a growing number of physiotherapists who have undergone additional training to be able to offer specialist services to older people. These physiotherapists may work in private practices, community services, hospital out-patient clinics and in-patient services. You can access specialist physiotherapy services via direct access, or through a referral from another physiotherapist or your GP.

#### Gerontological physiotherapists

Physiotherapists who work with older clients can provide comprehensive assessments, evidenced-based treatment and management strategies. They work in multidisciplinary teams and specialised gerontology services, addressing aging concerns as well as promoting and maintaining independence in mobility and daily living.

#### Neurological physiotherapists

Physiotherapists specialising in neurological conditions such as Stroke, Parkinson's and Motor Neuron disease, may offer tailored programs to reduce falls, as well as addressing vestibular and vertigo conditions if required.

#### Pelvic health physiotherapists

Physiotherapists can address continence issues for all genders with basic screening and lifestyle modification suggestions.

## What next?

#### GO TO choose.physio/find-a-physio To find your gerontological physiotherapist.

#### CHOOSE

*'Gerontology'* option under special interest area in the 'refine your search' drop-down box.

### www.choose.physio/aged-care

#### REFERENCES

Sherrington C, Tiedemann A (2015) Physiotherapy in the prevention of falls in older people. Journal of Physiotherapy 61:54-60 – This is an open access article under the CC BY-NC-ND license <u>http://creativecommons.org/licenses/by-nc-nd/4.0/</u>

Hewitt J. (2018). Progressive Resistance and Balance Training for Falls Prevention in Long-Term Residential Aged Care: A Cluster Randomized Trial of the Sunbeam Program. Journal of the American Medical Directors Association, 19(4):361-369 <u>https://pubmed.ncbi.nlm.nih.gov/29402651/</u>

Sherrington C, Fairhall N et al (2020) Exercise for preventing falls in older people living in the community: an abridged Cochrane systematic review <u>https://bjsm.bmj.com/content/54/15/885</u>