

# Falls prevention and exercise

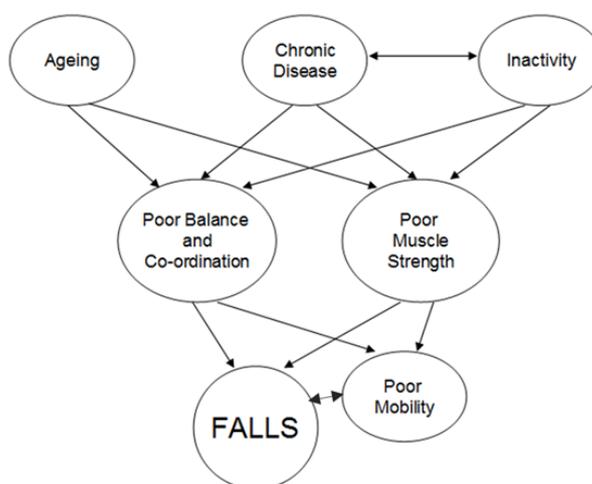
At least one-third of community-living Australians aged 65 years and over fall every year. Falls are the leading cause of injury-related death and hospitalisation in these people. An older person is over three times more likely to be admitted to a nursing home after a fall than before, and over ten times more likely after a fall that caused an injury (1). Almost three-quarters of people report slips, trips and loss of balance as the cause of their fall — that is, balance-related factors that are amenable to change.

## How can we prevent falls?

Developing strategies to prevent falls and fall-related injuries among older people is an important priority that is recognised by federal and state health departments. Many factors interact to increase the likelihood of falls in older people (Figure 1). Well-designed studies have shown that fall rates are significantly reduced in community groups through various interventions:

### Reducing falls in the community:

- exercising, especially programs that include balance training;
- improving vision (e.g. removing cataracts and restricting use of multifocal glasses);
- stopping medication that affects the brain (e.g. psychoactive drugs);
- modifying the home (for high-fall-risk groups); and
- improving podiatric treatment, and foot and ankle exercises



## How does exercise prevent falls?

There is now good evidence that exercise prevents falls in older people (4), by decreasing a number of key risk factors. For example, exercise can improve muscular strength, balance, balance confidence and walking speed, as well as psychological factors such as mental ability and mood. Exercise is recommended for all community members. However the benefits of exercise in frailer people are less certain and multifaceted interventions may be necessary for fall prevention in this group (6).

## What is the best kind of exercise to prevent falls?

Exercise programs should include balance training, be performed regularly, be of sufficient duration (at least 2 hours per week) and be ongoing (4). These factors increase the chance of the exercise in preventing falls. Good balance exercises involve controlled body movements while standing with the feet close together (or standing on one leg), with as little arm support as possible. The exercises should be safe, but should challenge balance and develop strength. Tai chi is an effective form of exercise for fall prevention in healthy older people (5). Group-based strength and balance classes can be monitored by professionals and are also a social occasion, but exercises can also be home based. Older and frail people might need individually tailored, home-based programs (6,7).

## References and further information

Exercise is Medicine Australia [www.exerciseismedicine.org.au](http://www.exerciseismedicine.org.au)

Find an Accredited Exercise Physiologist [www.essa.org.au](http://www.essa.org.au)

Exercise Right [www.exerciseright.com.au](http://www.exerciseright.com.au)

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5. Wolf SL, et al. Reducing frailty and falls in older persons: an investigation of Tai Chi and computerized balance training. *J Amer Geriatr Soc* 1996; 44(5): 489–97.
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7. Gillespie LD, et al. Interventions for preventing falls in older people living in the community. *Cochrane Database Syst Rev*. 2012 Sep 12;9:CD007146.

For more detailed information, please read the full version of this factsheet at [www.exerciseismedicine.org.au](http://www.exerciseismedicine.org.au)

