

Information about Falls: Why they happen and how to avoid them

Haywards Heath & District Probus Club



If you are over 65, beware of having a Fall. And, if you are over 80, take extra care because the risk of a Fall increases exponentially. The first thing to remember is that it is essential to keep calm if you have a Fall. Please note these four key facts:

FACT 1: Anyone can have a Fall, but older people are more vulnerable and likely to Fall, especially if they have a long-term health condition. Having a Fall can happen to anyone; it is an unfortunate but normal result of human anatomy. As people get older, they are more likely to fall over. Falls can become recurrent and result in injuries, including head injuries and hip fractures.

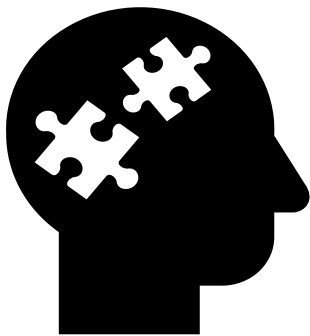
FACT 2: Falls are a common but often overlooked cause of injury. Around a third of adults over 65 and half of people over 80 will have at least one Fall a year.

FACT 3: Most Falls do not result in serious injury. But there is always a risk that a Fall could lead to broken bones, and it can cause the person to lose confidence, become withdrawn, and feel as if they have lost their independence.

FACT 4: The likelihood and severity of injury resulting from an event is related to bone health. People with low bone mineral density are more likely to experience a fracture following a Fall. One of the main reasons why people have low bone mineral density is osteoporosis. Over 3 million people in the UK have osteoporosis, and they are at a much greater risk of fragility fractures. Hip fractures alone account for 1.8 million hospital bed days and £1.9 billion in hospital costs every year, excluding the high cost of social care. It is possible to improve bone density or at least help to delay it by taking calcium and vitamin D (but you must check with the GP first) and weight-bearing exercise – such as walking within your personal limitations.

Not Hurt?

If you are not hurt and feel strong enough to get up, the best advice is: don't. Do not get up quickly. Roll onto your hands and knees and look for a stable piece of furniture, such as a chair or bed. Hold on to a chair or table with both hands to support yourself and slowly get up when you feel ready. Sit down and rest for a while before carrying on with your daily activities.



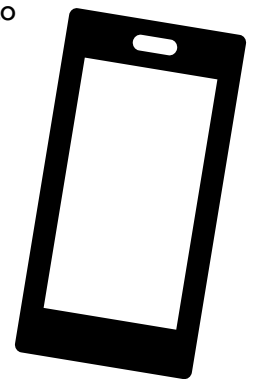
Are You Hurt?

If you're hurt or unable to get up, try to get someone's attention by calling out for help, banging on the wall or floor, or using your **personal alarm or security system** (if you have one). If possible, crawl to a telephone and dial 999 to ask for an ambulance. In the future, you may want to get a personal alarm system so that you can signal for help in the event of a Fall.

Try to reach something warm, such as a blanket or dressing gown, to put over you, particularly your legs and feet. Stay as comfortable as possible and try to change your position at least once every half an hour or so.

A good idea is to have a mobile phone in your pocket so you can call someone for help after having a Fall. If you have an Apple Watch Series 4 or later, it detects a hard Fall while you're wearing your watch - it taps you on the wrist, sounds an alarm, and displays an alert. You can choose to contact emergency services or dismiss the alert by pressing the **Digital Crown**, tapping **Close** in the upper-left corner, or tapping **"I'm OK."**

If you're living with or caring for an older adult, read what to do **after an incident**.



Caution: No articles published by us, regardless of date, should ever be used as a substitute for direct medical advice from your doctor or other qualified clinician/medical practitioner.

Why do Falls happen?

The natural ageing process means that older people have an increased risk of having a Fall. Falls can result from both exogenous (internal) and endogenous (external) causes:

- Internal: such as slipping on spilt liquid, tripping over a rug or wearing unsuitable footwear. These are mainly avoidable – it is essential to keep your home environment safe, and you should risk-assess your home. Remove rugs or obstacles, and make sure you wear sensible shoes.
- External: these are events arising from acute health problems, such as a transient ischaemic attack (TIA or mini-stroke) or cardiac events etc., both known and unknown.

Older people are more likely to have a Fall because of the interplay of multiple risk factors. These include:

- balance problems and muscle weakness
- **vision loss** or impairment
- having a history of Falls
- muscle weakness
- poor balance
- blood pressure changes – this can happen suddenly from when you are lying down then moving to standing or sitting – don't rush: move slowly when going from one to the other to avoid feeling dizzy or sick
- polypharmacy - and the use of certain medicines
- environmental hazards (see below)
- a long-term health condition, such as **heart disease**, **dementia** or **low blood pressure (hypotension)**, which can lead to **dizziness** and a brief loss of consciousness
- some specific medical conditions, which might make a person more likely to suffer a Fall

Environmental hazards can arise because:

- the floors are wet and slippery (such as in the bathroom) or have recently been polished.
- the lighting in the room is dim.
- rugs or carpets are not properly secured.
- the person reaches for storage areas, such as a cupboard, or is going down the stairs.
- the person is rushing to get to the toilet during the day or at night.

Another common cause of Falls, particularly among older men, is falling from a ladder while doing home maintenance work.

In older people, Falls can be particularly problematic because **osteoporosis** is a fairly common problem. It can develop in both men and women, particularly in people who smoke, drink excessive amounts of **alcohol**, take steroid medicine or have a family history of **hip fractures**.

Older women are most at risk because osteoporosis is often associated with hormonal changes during **menopause**.

How to Prevent a Fall

Several simple measures can help prevent Falls in the home, for example:

- using non-slip mats in the bathroom
- mopping up spills to prevent wet, slippery floors
- ensuring that all rooms, passages, and staircases are well lit
- removing clutter
- getting help to lift or move items that are really too heavy or difficult to lift

The charity - Age UK - has more advice about **home adaptations to make tasks easier**.

Healthcare professionals take Falls in older people very seriously because of the enormous consequences they can have for the health and wellbeing of older people. As a result, there's a great deal of help and support available, and it's worth asking a GP about the options that are available. The GP may carry out some simple tests to check your balance. They can also review any medicines you're taking in case their side effects may increase your risk of falling.

The GP may also recommend that you should:

- **look after your eyes** with a sight test if you're having problems with your vision, even if you already wear glasses.
- have an **electrocardiogram (ECG)** and checking your blood pressure while lying and standing.
- request a home hazard assessment, where a healthcare professional visits your home to identify potential hazards and give advice.
- do exercises to improve your strength and balance ([read about physical activity guidelines for older adults](#)).



Read [HERE](#) for more about preventing Falls.

Social care and support guide

The NHS [social care and support guide](#) explains your options and where you can get support if you:

- need help with day-to-day living because of illness or disability
- care for someone regularly because they're ill, elderly or disabled – including family members

Falls and fractures in older people are a costly and often preventable health issue. Reducing Falls and fractures is important for maintaining health, wellbeing and independence amongst older people.

Resources and Further Information

COVID-19 related resources

- DHSC & NHR: [COVID-19 technology for strength and balance](#). Delivery of strength and balance exercises for Falls prevention amongst older people using digital technologies to replace face-to-face contact during COVID-19 home isolation and physical distancing.
- [Keep on Keep up app](#). This app help reduce the high risk of Falls and physical decline in older people self-isolating during COVID-19 Lockdowns.
- Public Health England et al. [Active at home](#). A guide to being active at home during the coronavirus outbreak.

National Institute for Health and Care Excellence (NICE) guidance

- NICE (2019) [Surveillance of Falls in older people: assessing risk and prevention \(NICE guideline CG161\)](#).
- NICE (2017) [Falls in older people](#). This updated quality standard covers assessment after a Fall and preventing further Falls (secondary prevention) in older people living in the community and during a hospital stay.
- NICE (2017) [Falls in older people pathway](#). This pathway covers the assessment and prevention of Falls in older people - in the community and during a hospital stay.

Royal College of Physicians

- Royal College of Physicians (2017) [Bedside vision check for Falls prevention: assessment tool](#). The National Audit of Inpatient Falls (NAIF) has collaborated with partners to produce a new vision assessment tool that enables ward staff to quickly assess a patient's eyesight to help prevent them from falling or tripping while in hospital.
- Royal College of Physicians (2016) [Falls Prevention in Hospital: a Guide for Patients, their Families and Carers](#). This guide is designed to help prevent serious injury and unnecessary cost to the NHS caused by older people tripping or falling when they are in hospital.
- Royal College of Physicians (2015) [FallSafe resources](#). FallSafe was a quality improvement project that helped frontline staff to deliver evidence-based Falls prevention.
- Royal College of Physicians. [Falls and Fragility Fracture Audit Programme \(FFFAP\)](#). The Falls and Fragility Fracture Audit Programme is a national clinical audit designed to audit the care that patients with fragility fractures and inpatient Falls receive in hospitals and facilitate quality improvement initiatives.

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Other

- The [NHS website](#) has information and advice on Fall prevention.
- The CSP's [Get up and go – a guide to staying steady](#) is a 32-page guide for the public and patients on preventing Falls, produced by Saga in partnership with the CSP and PHE.
- [Age UK](#) provides information and advice on Falls prevention.
- [RoSPA](#) provides advice on how to make the home a safer environment.
- [NHS Rightcare Falls and Fragility Fractures pathway \(2017\)](#) NICE Impact Falls and Fractures.
- [Royal Osteoporosis Society Clinical Guidance' A Safe Home](#) provides information on preventing Falls at home developed by NHS 24's Scottish Centre for Telehealth and Telecare (SCTT). [Spot the Hazard](#) game on spotting Falls hazards in the home.
- PHE's [Everybody active, every day: an evidence-based approach to physical activity](#), published in 2014, is a physical activity strategy co-produced with over 1,000 partners, including health and professionals, local authorities, research specialists, educationalists, charities and fitness experts.
- [Raising the Bar on Strength and Balance](#), Centre for Ageing Better, 2019.
- [Falls Management Exercise \(FaME\) toolkit \(2020\)](#)

Further resources

- NHS Improvement. [Patient Safety Collaboratives – Making care safer for all](#). Supporting trusts to reduce Falls is a priority for NHS Improvement. Case study – Safety huddles reduce Falls by as much as 60 per cent (page 10)
- NIHR [Falls Management Exercise \(FaME\) Implementation Toolkit](#). This toolkit provides a suite of resources that commissioners can use to plan, implement and monitor the FaME programme.
- Public Health England. [Falls: applying All Our Health](#). Updated information on preventing Falls and fractures. See also: [e-LfH - Falls and fractures prevention e-learning module](#).
- Public Health England and Centre for Ageing Better (2018) [Muscle and bone strengthening and balance activities for general health benefits in adults and older adults](#). Summary of a rapid evidence review for the UK Chief Medical Officers' update of the physical activity guidelines.
- Public Health England. [Falls prevention: cost-effective commissioning](#). The return on investment tool pulls together evidence on the effectiveness and associated costs for interventions to prevent Falls in older people living in the community.

Osteoporosis

Over 3 million people in the UK have osteoporosis, and they are at much greater risk of fragility fractures. Fragility fractures are fractures that result from mechanical forces that would not ordinarily result in fracture, known as low-level (or 'low energy') trauma. The World Health Organization (WHO) has quantified this as 'forces equivalent to a Fall from a standing height or less'. Hip fractures alone account for 1.8 million hospital bed days and £1.1 billion in hospital costs every year, excluding the high cost of social care.

Fragility fractures are most common in bones of the spine, wrists and hips. The risk of osteoporosis starts to increase in women after menopause because their ovaries no longer produce oestrogen, which helps to protect the bones.

People may also be at increased risk of osteoporosis because it runs in their family or because of the side effects of some medications such as steroid tablets or injections. Therapies and treatments are available to help prevent fractures in people with osteoporosis. Other factors can also put a person at risk of fractures: low body weight (BMI <19), a diet lacking in calcium and vitamin D, poor mobility, smoking, alcohol, diabetes, certain long term medications, especially corticosteroids.



Picture Credit: "Blood pressure measuring. Doctor and patient. Health care." by agilemktg1 is marked with CC PDM 1.0

Medications

Any of the following medications can increase the chance of a Fall:

- Blood pressure tablets
- Diuretics or water tablets
- Sleeping tablets
- Heart medicines
- Laxatives
- Painkillers
- Muscle relaxers
- Antihistamines

Taking more than four medicines a day can increase your risk of a Fall. Ensure that your GP has reviewed your medications in the last six months to check they are still the most effective for you.

Hearing Loss

A hearing problem can severely affect your balance. Health conditions common in older people, such as diabetes or high blood pressure, can contribute to hearing loss. Viruses and bacteria (including the ear infection otitis media), a heart condition, stroke, brain injury, or a tumour may also affect your hearing. A 25-decibel hearing loss—equivalent to going from normal to mild hearing loss—triples your chance of having a Fall. Hearing aids work by making sounds louder and clearer. They will not restore your hearing to normal or cure your hearing loss, but they can make life much easier, according to AgeUK ([HERE](#)).

Researchers at the Johns Hopkins School of Medicine and the National Institute of Ageing discovered that hearing loss increases the risk of Falls for older people by a significant amount. The research found that the risk of having a Fall is even higher for people with more severe hearing loss: the risk increases 140% for every additional 10 decibels of hearing loss ([HERE](#)).

A word or two about Footwear and Lighting

Poorly fitting **footwear** will increase your falls risk.

- Avoid backless slippers; make sure your footwear fits properly and has a non-slip sole.
- Shoelaces can become a trip hazard - try slip-on shoes instead.
- Avoid walking in socks or tights as these are more slippery.

Poor **lighting** is often the cause of a fall. Make sure there is enough lighting to help you move safely around your living environment.

- Some energy-saving bulbs are slow to produce a lot of light. If these are in areas such as bathrooms, stairs and hallways, change to instant lighting to help you see better, alternatively leave them switched on.
- Make sure switches and cord-pulls are within easy reach during the night. A bedside lamp or a night light could be left on overnight. It's a good idea to have a torch close handily available during the night.
- If any of your rooms suffer from daylight glare on sunny days, take extra care moving around. Natural light is good for you, so try not to shut it out.

Source: Essex County Council and North East Essex Clinical Commissioning Group, TUMBLES Booklet ([HERE](#))

How to Use Walking Steadiness on an iPhone to Prevent Falls

The iPhone can now offer help for those unsteady on their feet: The iPhone Life Tip of the Day on 26th October 2021 explains how. Click [HERE](#) to read the article in full, but snippets of it appear below.

The World Health Organization says that over 37 million people each year have a Fall and suffer injuries bad enough to need medical attention. Thankfully, Apple's iOS 15 includes a new *Walking Steadiness* score in the Mobility section of the Health app to help you keep yourself and your loved ones safe from Falls.

Since this Health app *Walking Steadiness* tip is specific to iOS 15, if you have an earlier software version, you will need to update to iOS 15 before using these steps. It's also important to remember that *Walking Steadiness* metrics can't prevent Falls altogether, but they do provide valuable data to allow you to keep track of risk factors and movement patterns related to a Fall risk.

Getting up after a Fall: prevent added injury with safe techniques

According to statistics ([HERE](#)), more than 1 in 4 people age 65 and older suffer a Fall each year. And, falling once doubles the chances of falling again. Even worse, after an older adult falls, lying on the floor for a long time or getting up badly could cause additional injury – even if they were not seriously injured from the Fall itself.

For example, someone who cannot get up from the floor or call for help **may develop serious complications** like **dehydration**, hypothermia, **pneumonia**, or **pressure sores**.

To combat these problems, it's possible to learn safe techniques to get up from a Fall. Knowing what to do if a fall does occur and practising ahead of time will give potential fallers confidence that they'll be able to help themselves and minimise injuries.

I found a helpful 5-minute video (click [HERE](#)) demonstration of safe techniques for getting up after a Fall – it outlines the key steps to take to get up or to call for help.

Conclusion

A large body of evidence shows that efforts to include exercise decrease the risk of Falls, yet the very fear of falling can reduce participation in physical activity.

Possible interventions to prevent Falls or injury from Falls, include:

- Environmental adaptations: Improvements to the person's environment, such as their home or workplace, may help to reduce the risk of falling. These include reviewing the current living conditions, adding safety devices, such as grab handles, high friction floors, and low power lighting at night to the person's home or work environment and identifying and removing potential hazards.
- Behavioural interventions: Regular exercise - lower limb strengthening exercises, increase muscle strength. Other forms of exercise, such as those involving gait, balance, coordination and functional tasks, may also help improve balance in older adults.
- Monitoring of medications and ongoing medical problems.
- Improvements to footwear and use of orthotic devices if required.
- Drinking water throughout the day is good for you.
- Hip protectors may decrease the risk of hip fractures slightly, although they may slightly increase the risk of a pelvic fracture in older adults living in nursing care facilities.
- Treatment for osteoporosis.

Additional Acknowledgements

This paper is based on text derived from sources (listed below). © Copyright, including Crown Copyright when applicable, is duly acknowledged.

Sources:

<https://www.nhs.uk/conditions/Falls/>

<https://www.rcn.org.uk/clinical-topics/older-people/Falls>

<https://www.gov.uk/government/publications/Falls-applying-all-our-health/Falls-applying-all-our-health>



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