

This guide explains how stroke can affect your balance, what can help, and how you can look after yourself if your balance is affected.

When you are moving around, your brain needs to coordinate information from your eyes and the balance system in your inner ear, as well as controlling your muscles and joints.

A stroke can change the way your brain controls balance, and you could feel unsteady or uncoordinated. There are some other causes of balance problems, and treating an underlying condition can help improve your balance. Some of these conditions are covered in this guide, but you always need to take individual advice from a GP or therapist about any balance problems you may have.

# How can your balance be affected by stroke?

## Weakness on one side of your body

A stroke often causes weakness on one side of your body, which can make it difficult to balance. At worst, you may find it difficult to sit up safely, or you may have difficulty standing. You may be able to walk but find that you can't lift your toes quickly enough to stop them catching on the ground when you step. This is known as foot drop, and it can make you feel unsteady or more likely to trip. Or you may find that you have less energy, so that you tire easily and then become unsteady.

#### Loss of sensation

The second main factor affecting balance is loss of sensation in your affected side, particularly your legs. If you cannot feel where your leg and foot are, it is very difficult to know how to move. You will automatically use your vision to compensate for the lack of feeling, which takes a lot of concentration and is tiring. It also means that you may be less aware of your surroundings. All of this increases your risk of having slips, trips and falls.

## Concentration problems

After a stroke, moving around and keeping your balance may require more concentration, which is hard work. Dealing with any situation which needs concentration could affect your balance. Many people who fall report that they were not paying attention, were thinking of other things or doing several things at the same time when they fell. One example is walking and talking at the same time: you might find you need to stop walking if you want to listen or talk.

Other things that can be difficult if you have concentration problems include being in a busy environment, or on an uneven surface, and needing to make sudden changes in direction.

## Vision problems

Vision is an important aspect of balance. Vision problems are quite common after stroke, including difficulty focusing, double vision and eye movement problems. If you have hemianopia (missing part of your field of vision), you might not see things in your way.

It can be harder to make the quick adjustments to your posture and movements to maintain your balance if you cannot see clearly around you. This can lead to bumping into things or stumbling.

Have a regular eye test, and wear glasses if you need to. Your optician can refer you for specialist help with any vision problems or low vision. Good lighting in your home can help. Keeping your space free of clutter can also help you see obstacles. See our guide 'Vision problems after stroke' for more information.

## Neglect

Spatial neglect, or inattention, means that your brain is not processing sensory information from one side. You might not be aware of one side of your body, and the space to that side. People with neglect may try to move but forget to move their weak leg, causing loss of balance. They might bump into or trip over objects they can't see on that side of their body, causing a fall. Some people experience the sensation that they are upright even when they are leaning heavily to their weak side, sometimes to the extent that they cannot sit up safely. This is called 'pusher syndrome' and sometimes happens in the early days after a severe stroke.

#### **Ataxia**

People with ataxia have difficulty with controlling smooth movements. Movements of your limbs and body tend to be shaky, and arms or legs can miss their target. This can make balance difficult when sitting and standing.

If your steps are poorly coordinated it means that your feet might not end up in the exact position you wanted, and this can make it difficult to balance.

## Perceptual problems

Some strokes can affect your ability to interpret your surroundings. It can be difficult to maintain your balance and plan how to move if you are unsure of your own position in relation to the space around you.

#### Vertigo

If a stroke happens in your cerebellum or brainstem, the areas that control balance in the brain, you may be left with vertigo. This means having a feeling that you or the world around you are moving or spinning. You can feel dizzy or lose your balance.

### Side effects of medication

Some medicines commonly prescribed after stroke can cause dizziness or weakness, including some high blood pressure medication. Withdrawal from antidepressants can cause dizziness. Interactions between different medicines can also affect your balance. Talk to your doctor or pharmacist if you have any concerns about the medicine you are taking, as you may be able to try new drugs or a different combination of drugs. Never stop taking any medication without speaking to your doctor first.

## Other causes of balance problems

A range of other conditions not directly related to stroke can also cause dizziness and loss of balance. These include inner ear infections, migraines and confusion due to a urinary tract infection.

# What help is there for balance problems?

From 24 hours after a stroke, with your therapists' help, you can try to help your recovery by starting to get moving. Improvement tends to be fastest in the first few days or weeks after stroke, but can continue slowly for months or even years. However, everyone is different and there is no fixed time for recovery.

## **Physiotherapy**

A physiotherapist can assess you and recommend therapy or exercises that may help you to recover. You should see a physiotherapist while you are in hospital. If you have left hospital, your GP can refer you for physiotherapy. Private physiotherapists and some NHS services will accept a self-referral where you can go to them directly to request assessment and treatment. For more information, see our guide 'Physiotherapy after stroke'.

## **Balance retraining exercises**

A physiotherapist might give exercise and balance re-training. They will work with you to find out what you find difficult, and set activities to help you improve your balance. The activities will become gradually more challenging to help you improve.

Therapy might start with keeping your balance while sitting up in bed or on a chair. The therapist might ask you to balance whilst standing, perhaps with the help of a hoist, or the support of other people.

Exercises may then include step-ups, moving from sitting to standing position, practising reaching for objects and standing on unstable surfaces. Other activities might include moving past obstacles, changing direction and speed, and walking up stairs. You'll only be asked to do these when the therapist thinks it's safe for you. Balance retraining may start with one-to-one sessions with a physiotherapist, and you can carry on by practising yourself or with support from family or carers. You might be able to join a therapy group in hospital or attend via a video call or online meeting.

People sometimes feel worried about falling while practising balance. If you are concerned, ask your therapist for advice to help you continue with your exercises and make the best possible recovery.

## **Activity and fitness groups**

Some stroke clubs and other community groups run exercise classes or offer other services to help people with disabilities stay active. Group activities might take place in person, or by video call or online meeting. See our guide 'Getting active after a stroke' for more ideas about staying active.

#### Gaze stabilisation

Gaze stabilisation exercises can help people with ongoing dizziness and vertigo. They need to be prescribed carefully and should be delivered by a physiotherapist who specialises in dizziness.

## Equipment to help with balance problems

A simple walking stick or four-point cane can improve your stability and improve your confidence, especially when walking outside. Even if you do not need to lean on the stick for support, people will often give you a little more time and space. It is important that any equipment is the correct size for you, so get professional help when choosing.

If you have foot drop (difficulty lifting your foot off the ground when walking) you may be offered an ankle-foot orthosis. This splint lifts your toes and supports your ankle so you can put your weight on your leg when you stand without catching your toes when you step forward. Your physiotherapist can prescribe a splint or may refer you to the local orthotics department See our guide 'Physical effects of stroke' for more information on drop foot and the treatments available.

# I'm worried about falling, is there any help available?

Most areas offer services to support people at risk of a fall. In some areas this is called a falls service or a falls prevention service. The way services run varies, but they all offer rehabilitation for people who have been injured in a fall and advice on how to prevent falls and injuries in the first place. They will help you address issues including:

- Any other conditions you have which may increase your risk of a fall.
- Reviewing your medication to make sure
  it is not causing side effects that increase
  your risk of a fall. If you take long-term
  medication, it should be reviewed at least
  once a year, particularly if you take four
  or more types of medicine a day. You can
  discuss any medication issues you have
  with your community pharmacist. Your
  community pharmacy can also assist with
  mobility aids.
- · Vision problems.
- Your feet and footwear.
- Your home environment, to see if there is anything that increases your risk of a fall such as loose rugs and mats. There may be simple adaptations that can help, such as a hand rail for steps or a seat to help you get in and out of the bath.
- They may also offer exercises (possibly in a group setting) to strengthen your legs and improve your balance.

If you have fallen or you feel worried about falling, ask your GP to refer you for help, such as your local falls service. A physiotherapist can give you individual advice.

## Tips to avoid a fall

- Keep floors clear of trailing wires, loose rugs, frayed carpet or anything else you might trip on.
- Mop up any spills straightaway.
- Organise your home so that you are less likely to bump into things. Remove clutter and arrange your furniture so that you don't have to walk around it. Move frequently-used items from high cupboards so that they are easily accessible.
- Often falls happen when people are not paying attention, are thinking of other things or doing several things at once. Try to avoid doing two things at once, such as walking and talking on the phone.
- Focus on your movements when you are doing anything tricky like turning, going up and down stairs, or getting in and out of the bath or bed. These are all common times when falls happen. Step around carefully when you are turning (rather than twisting), hold on to whatever solid objects are around and take your time. Use aids if you have them and get someone to help if you need to.
- Move at a speed that you find comfortable.
   Don't feel rushed by pressures of everyday life to do things more quickly.
- Talk to an occupational therapist about getting handrails for the stairs and bathroom. Your GP can refer you to see one.
- Use high wattage light bulbs so you can see clearly, particularly around stairs. If you get up in the night, make sure you turn the light on.
- Keep your home warm cold muscles work less well and this can lead to accidents.
- Remember to use any walking aids, such as sticks or frames that your therapist has recommended.

- In case you do have a fall, you may want to consider getting a personal alarm. See our guide 'R03, Aids and equipment for independent living'.
- Wear well-fitting shoes or slippers with thin soles, high sides and a good grip.
   Never walk on slippery floors in socks or tights.
- Talk to a podiatrist (also called a chiropodist) about any foot problems – these can increase the risk of falls if left untreated. Your GP may be able to refer you to one.
- Have regular eye tests. Wear any glasses that have been prescribed for you.
- Ask for help with tasks that you cannot carry out safely, or leave them if they are less important.

## Where to get help and information

#### From the Stroke Association

## Helpline

Our Helpline offers information and support for anyone affected by stroke, including family, friends and carers.

Call us on **0303 3033 100**, from a textphone **18001 0303 3033 100** Email **helpline@stroke.org.uk**.

#### Read our information

Get more information about stroke online at **stroke.org.uk**, or call the Helpline to ask for printed copies of our guides.

## My Stroke Guide

The Stroke Association's online tool My Stroke Guide gives you free access to trusted advice, information and support 24/7. My Stroke Guide connects you to our online community, to find out how others manage their recovery.

Log on to mystrokeguide.com today.

## Other sources of help and information

## Age UK

Website: ageuk.org.uk/falls

Tel: 0800 055 612

Specialist information for older people including guidance on avoiding falls, plus wellbeing and tips on strength and balance.

## **Chartered Society of Physiotherapy (CSP)**

Website: csp.org.uk

Tel: **020 7306 6666** 

Offers a search facility for finding a qualified, private physiotherapist.

## Online strength and fitness tools

Before you follow advice and exercises online, check with your physiotherapist or GP to make sure it's safe for you.

#### nhs.uk/falls

This NHS page gives practical tips for reducing falls, and links to home exercise videos and exercises.

### Mystrokequide.com

My Stroke Guide has a 12-step video programme to help you be more active. It's tailored to people with different levels of mobility so you can choose the right activities for you.

Your notes	

## **About our information**

We want to provide the best information for people affected by stroke. That's why we ask stroke survivors and their families, as well as medical experts, to help us put our publications together.

## How did we do?

To tell us what you think of this guide, or to request a list of the sources we used to create it, email us at feedback@stroke.org.uk.

#### **Accessible formats**

Visit our website if you need this information in audio, large print or braille.

## Always get individual advice

This guide contains general information about stroke. But if you have a problem, you should get individual advice from a professional such as a GP or pharmacist. Our Helpline can also help you find support. We work very hard to give you the latest facts, but some things change. We don't control the information provided by other organisations or websites.

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