

Chest  
Heart &  
Stroke  
Scotland



# STROKE



ESSENTIAL GUIDE

# This booklet is about stroke.

## It explains:

- What a stroke is.
- Common symptoms of stroke.
- Types of stroke.
- Tests and treatments you might receive.
- Reducing the risk of another stroke.
- Where to find help.

# What is a stroke?

A stroke happens when there is a clot or a bleed in a blood vessel in the brain. This leads to part of the brain not receiving oxygen and nutrients. This can cause the brain cells to become damaged and die.

The effects of the stroke will depend on the extent and location of the damage.

A stroke is an emergency. The longer it takes to get help, the more damage will be done.

If you think you or someone else is having a stroke, you should call 999 immediately.



# Spotting a stroke

There are some key signs that may suggest someone is having a stroke. If you suspect someone is having a stroke, you should call 999 as soon as possible.

The acronym used for these signs is FAST:



## **F - FACE** (Face)

Does the person struggle to smile?  
Does one half of their face droop?



## **A - ARMS** (Arms)

Does the person struggle to lift both arms?



## **S - SPEECH** (Speech)

Is the person's speech slurred or unclear?



## **T - TIME** (Time)

Call 999 as soon as possible.  
Time is of the essence.

Other signs of a stroke include:

- Sudden weakness or numbness on one side of your body.
- Unfocused or blurred vision, or sudden blindness in one or both eyes.
- Difficulty understanding what people around you are saying.
- Difficulty talking or communicating.
- Losing your balance.
- Feeling confused or dizzy.
- A sudden change in your facial expression, like finding it hard to smile.

If you have any of these symptoms, even if it is only for a short time, call 999 and ask for an ambulance.



# Types of stroke

There are two main types of stroke: ischaemic and haemorrhagic.

Out of every **100 strokes**, about **85 are ischaemic** and about **15 are haemorrhagic**.

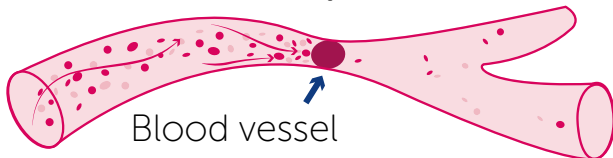
## Ischaemic stroke

This happens when a blood vessel in your brain is blocked, usually by a blood clot.

### Normal blood flow



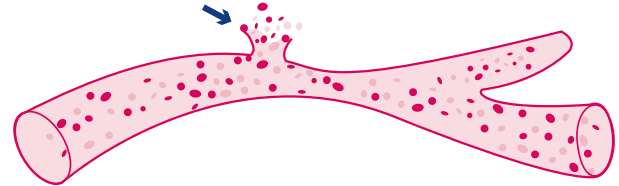
### Blood flow interrupted



## Haemorrhagic stroke

This happens when a blood vessel in your brain bursts, causing bleeding in or around your brain. This puts pressure on some parts of the brain, while other parts do not receive blood at all.

### Burst blood vessel



Different medications may be prescribed for different types of stroke. The type of stroke, how long it lasts, and where in your brain it is will all affect your treatment.

# Transient ischaemic attack (TIA)

A transient ischaemic attack is a condition with the same symptoms as a stroke. However, blood flow is only blocked for a short time and restores itself without treatment.

Symptoms usually disappear within 24 hours, and may be gone within a few minutes or hours. A TIA's symptoms will not last for more than 24 hours.

If you have had a transient ischaemic attack, you are at much higher risk of having a stroke, especially in the days and weeks immediately after the transient ischaemic attack.



If you have any symptoms of stroke, including ones that pass quickly, **call 999 immediately.**

# What happens after a stroke?

When you have a stroke, you should be taken directly to hospital by emergency ambulance. This will let the ambulance staff monitor and treat you immediately, and to tell the hospital staff you are coming so that they can prepare.

At the hospital you will usually go to a specialist stroke ward for care and assessment. If this is not appropriate, you may go first to A&E or another assessment ward.

At hospital you will:

- Be given some tests to see whether you have had a stroke, and if so, what kind.
- Have an initial assessment to see what effect your stroke has had on you. This should include a swallowing assessment.
- Start treatment.

# Tests

You will need to have tests to see whether you have had a stroke, what kind of stroke it was, and what treatment is appropriate.

## Brain scan

A brain scan will usually be done immediately to see what has happened.

**Computed tomography (CT)** is an X-ray scan of the brain. It will show doctors whether your stroke was caused by a clot or a bleed. It is quicker than an MRI.

**Magnetic resonance imaging (MRI)** gives a detailed image of the brain. The scan is taken in a large, tunnel-shaped scanner. You may not be able to have this scan if you have a pacemaker or hip replacement.

## CT angiogram

Computed tomography can also be used to look into your blood vessels and see where the damage is. This is vital for thrombectomy.

## Electrocardiogram (ECG)

This scan measures the rhythm of your heart and may show up heart problems.

## Blood pressure check

To check for high blood pressure, which is the biggest risk factor for stroke.

## Oxygen saturation

The levels of oxygen in your blood will be assessed using a monitor on your fingertip.

## Blood tests

Tests for cholesterol, blood sugar, or blood clot issues can help find the cause of stroke.

## Chest X-ray or echocardiogram

A chest X-ray or an echocardiogram (an ultrasound scan of your heart) can explore underlying heart or breathing problems.

## Carotid doppler scan

An ultrasound scan of the arteries in your neck may show any narrowing or blockages which might have contributed to your stroke.

# Stroke assessment

After your stroke, you will be monitored carefully in the hospital. Nurses will regularly check:

- Your blood pressure and pulse.
- Your temperature.
- Your respiratory (breathing) rate.
- Your blood sugar levels.
- The amount of oxygen in your blood.
- How much urine you pass.

This will help staff to know what is going on inside your body, which can help to assess what effect the stroke has had on you.

It will also help staff to be sure that any treatments you are receiving are safe and effective.

Soon after your stroke, you may also have other tests and assessments. Commonly, these will include:

## **Nutrition (food) assessment**

This checks whether you need dietary supplements or extra fluids.

## **Motor assessment**

This checks if you have difficulty moving your limbs, hands, and feet after your stroke.

## **Communication assessment**

You will be asked questions and given tasks to check whether your speech or understanding have been affected by your stroke.

## **Skin care assessment**

Your skin will be checked for any wounds and a plan made to avoid pressure sores.

## **Continence assessment**

This checks whether your bladder and bowels work properly following stroke.

# Immediate treatment

You will be given treatment as soon as the doctors know what kind of stroke you have had. This might include:

## Thrombectomy

Thrombectomy is used when there is a clot blocking blood flow. It does not make another clot - or another stroke - less likely.

A small tube is inserted into an artery, usually in your leg. It is passed through the blood vessels into your brain, where it is used to remove the clot blocking the blood flow.

Thrombectomy treatment can only be given within 6 hours of your stroke. This means not everyone will be suitable for thrombectomy.

Some treatments, especially ones with a short time window, have very specific criteria and may not be suitable for you.

## Thrombolysis

Thrombolysis is used when a blood clot is identified as causing the stroke. Medicine is given through a drip in your arm. It breaks up the clot to let the blood start flowing properly.

Thrombolysis can only be given within a short time window (a few hours) after a stroke. You will be monitored for 24 hours afterwards.

## Starting medications

You may be given **statins** (a kind of medication used to lower cholesterol), **blood thinners/anticoagulants**, or other medications such as **aspirin** if you have had an ischaemic stroke.

You will probably need to keep taking these for the rest of your life. They reduce the chance of another stroke, but do not treat the effect of the stroke you already had.





# Effects of a stroke

How you are affected by a stroke will depend on the amount of damage to the brain and where in the brain was affected. Many effects you experienced immediately after a stroke may improve with time.

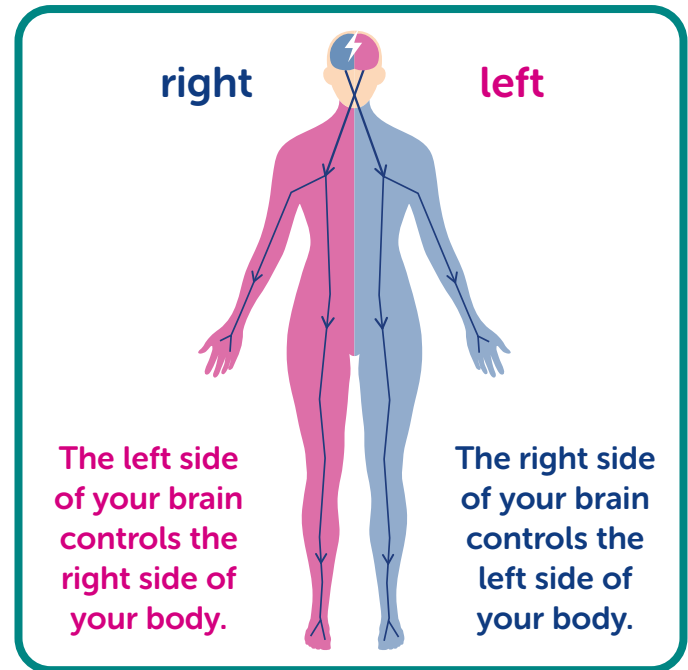
## Common effects of a stroke include:

- Extreme tiredness or fatigue.
- Physical changes, like muscle weakness or difficulty with balance.
- Communication difficulties, like trouble speaking or understanding.
- Changes to thoughts and feelings.
- Pain or discomfort.
- Changes in how you see.
- Loss of bladder or bowel control.
- Changes to your sex life, fertility, or periods (if you have them).

**You should always be able to ask questions about how the stroke has affected you.**

As a general rule, if the stroke affected the left side of your brain, you will experience changes mostly in the right side of your body.

If the stroke affected the right side of your brain, you will experience changes mostly in the left side of your body.



## Fatigue

Fatigue is common after stroke. This is because your body is working hard to heal itself, using more energy. You may also sleep poorly after your stroke, which can make fatigue worse.

Fatigue means a lack of energy. It can also include:

- The feeling of weight pressing on you.
- Difficulty thinking clearly.
- Difficulty with doing activities that used to be easy.
- Needing longer to recover from exercise.

Listen to your body. Try to rest where possible and to take breaks between activities.



Careful exercise can build up your strength and make fatigue less intense.

## Muscle weakness and balance

Many people find that the muscles on one side of their body are weakened or paralysed after a stroke. You may find it hard to get up or keep your balance. You may also find that fine movements, like writing or applying makeup, are more difficult.

You may be referred to Physiotherapy or Occupational Therapy, who will work with you on what is important to you to help you recover.

You can also access aids to help with mobility problems. This might mean using a walking stick, crutches, wheelchair, or walking frame.

Your balance can be affected by a stroke. You may find it harder to stand or walk, or be more prone to dizziness. This may get better with time. You may also find that moving slowly improves your balance.



## Vision and hearing difficulties

Around two-thirds of people who have had a stroke have problems with their vision, like:

- Loss of part of your visual field.
- Problems processing what you see.
- Problems with eye movements.
- Double vision or loss of focus.
- Light sensitivity or dry eyes.
- Visual hallucinations.

These problems may improve over time, and you may be able to manage them with aids and exercises. After a stroke, you should have your vision tested to check for any problems.

A stroke can also change your hearing, or even make you deaf. If you notice changes in your hearing (such as difficulty hearing, muffled sounds, or a persistent sound which doesn't seem to come from anywhere) let your health professional know. They may be able to refer you to a hearing specialist and/or offer hearing aids and support.

## Communication

Around one in three people who have a stroke have difficulty communicating as a result. The main types of communication difficulties caused by stroke are **dysarthria**, **ataxia of speech**, and **aphasia**. You may have one or more of these.

**Dysarthria** and **ataxia of speech** are both conditions where you cannot fully control the muscles in your face, mouth, or throat. This can make it hard to speak. It can also make it difficult to eat or drink.

**Aphasia** is a type of brain damage which affects your ability to speak or understand language. This may affect your speaking, writing, reading, or your ability to understand what other people are saying to you. Some people who speak more than one language find that aphasia affects one language more than another.

## Thoughts and feelings

A stroke is a traumatic event, and you may react in unexpected ways. You may struggle with feelings of loss, frustration, or isolation.

A stroke can also affect the parts of your brain that control emotions, causing more direct effects. You may find it more difficult to:

- Remember things.
- Find your way around.
- Recognise faces, people, or places.
- Respond to what is going on around you.
- Control your emotions.

These changes can be difficult for you and the people around you, but usually improve with time. Emotional symptoms are usually worst in the first few weeks.

If you continue to struggle, you can be referred to a health professional or therapist who can help you to learn techniques to manage your thinking or emotions.

## Pain and discomfort

Up to half of all people who have a stroke will experience pain as a result. This can include:

- Muscle tightness, stiffness, or spasms.
- Headaches.
- Pain from overworking weak muscles.
- Central Post-Stroke Pain (nerve pain which can affect the whole body).

If you experience pain or discomfort after a stroke, speak to a health professional.

## Bladder/bowel control

Bladder and bowel control can be affected by a stroke. This can mean you need to go to the toilet more often, or are unable to hold it in.

The health staff will assess your toilet habits and needs, and produce a treatment plan if needed. This might include products to help (like incontinence pads or catheters) or exercises to strengthen the muscles that control your bladder and bowel.

# Recovery from stroke

Recovery from a stroke may be slow and gradual. You will be discharged at an appropriate time to continue your recovery and rehabilitation at home. This may include help from health professionals and carers, who will help you reach your goals.

How well you recover after a stroke will depend on a number of things, including:

- The type of stroke you have had.
- Your symptoms.
- What part of your brain was affected.
- Your age and health before your stroke.

You should have a stroke support team which may include:

- Stroke nurses
- Physiotherapists, occupational therapists
- Speech and language therapists
- Psychologists
- Specialist doctors

# What happens next?

Before being discharged, there will be a discussion with you, your family and anyone involved in your care. These discussions will include any assessments you have had, and any equipment, supplies and care/assistance you might need.

Your medications will be explained to you and a supply provided, along with any medication aids or charts you might need.

This will continue to be reviewed once you get home.

Going home may be quite scary for you and your carer or family. Remember that you can always ask questions, reach out to your team for support, and find help in your community. You don't have to manage this alone.

You can also get support from your GP, pharmacists, and social services. Friends and family may be able to offer care and support.

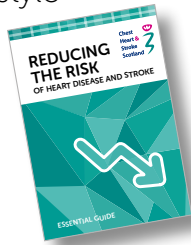
# Will I have another stroke?

Your risk of a stroke is higher if you have already had a stroke. However, you can take steps to reduce the risk.

Your risk of stroke is also higher if you have a close relative (sibling, parent, or child) who has had a stroke, especially if they were under 65 when they had it.

It is important to take any medication you have been prescribed to reduce the risk of further stroke.

For more information on what lifestyle factors increase your risk of stroke, and how you can reduce these risks, read the Chest Heart and Stroke Scotland booklet on **Reducing The Risk of Heart Attack and Stroke**.



# Finding support

Chest Heart and Stroke Scotland offers a range of support following a stroke. You can find out more by calling our Advice Line on **0808 801 0899**.

This may include:

- **Stroke nurses** who can provide information and support to achieve your goals.
- **Community Support Services** to support you when you leave hospital and return home to daily life.
- **Peer support groups** to meet people who are struggling with the same issues and challenges.
- **Information and advice** on any questions you might have on any topics.



Our publications are available for free to anyone in Scotland who needs them. Go to [www.chss.org.uk/resources-hub](http://www.chss.org.uk/resources-hub) for all our resources, including other Essential Guides in this series.

For free, confidential advice and support from our **Advice Line nurses**, call: 0808 801 0899 (Mon-Fri 9.30am-4pm), text: NURSE to 66777 or email: [adviceline@chss.org.uk](mailto:adviceline@chss.org.uk).

Across Scotland, over one million people – that's one in five of us – are living with the effects of a chest, heart or stroke condition. We are here to help everyone who needs us. But we need your support to do this. Go to [www.chss.org.uk/supportus](http://www.chss.org.uk/supportus) to find out how you can help more people in Scotland.

**If you would like this resource in an alternative format, please contact our Advice Line nurses.**

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**NO LIFE HALF LIVED**

**E16** Published May 2024  
Next planned review May 2026

Scottish Charity (no SC018761)