How to reduce your risk of a stroke

Active steps everyone can take
Stroke and you

How much do you know about your risk of a stroke?

I’m too young to think about stroke
A quarter of all strokes happen to people aged 18-65 who may feel fit and healthy. For some easy ways to discover your own risk of a stroke, see page 5.

I’m older or have some health problems
It is never too late to take steps to reduce your risk of a stroke, like being more active, eating healthily, and treating your health problems. To find out more, see page 9.

I have high blood pressure
High blood pressure is a factor in up to half of all strokes. For more information, see page 22.

I’m a smoker
Stopping smoking is one of the best things you can do for your health. For help with quitting, see page 10.

I could do with losing weight
Being overweight or obese means you are more likely to have a stroke. For more information and healthy living ideas, see page 11.

I’ve had a stroke or a TIA (transient ischaemic attack or mini-stroke)
If you’ve already had a stroke or TIA, you are at higher risk. This guide includes handy tips that can help you reduce your risk of another stroke, and how to get more help and support so you don’t feel alone. To find out more, see page 21.
Your risk of a stroke

When doctors use the word risk, they mean your chances of having an illness. Everyone has a different risk of having a stroke, which depends on the unique factors that belong to them.

Risk factors can be anything about you and your lifestyle, like your age, a health problem, or whether you drink or smoke.

If you have had a stroke or TIA (mini-stroke), you are at higher risk of having a stroke in the future. You will have advice from professionals about treating any medical conditions that could have led to your first stroke or TIA, such as high blood pressure. For more information, see page 21.

Turn to page 9 for healthy lifestyle choices everyone can try!
The main risk factors for stroke

Age
As you get older, your arteries naturally become harder, making them more likely to become blocked. You can take active steps to reduce your stroke risk at any age, so have a look at our healthy living tips on page 9.

Health problems
Some health problems raise your risk of a stroke. These include:
- High blood pressure.
- Atrial fibrillation (irregular heartbeat).
- Diabetes and pre-diabetes.
- High cholesterol.

Lifestyle
Stroke risk can be increased by things we do in everyday life, including:
- Smoking.
- Being overweight.
- Drinking too much alcohol.
- Not getting much exercise.
- Eating unhealthy food.

Family history
Strokes can run in families, so speak to your GP or nurse if you have a family history of stroke. You may need some tests and health checks, and advice on reducing your risk.

Ethnicity
Strokes happen more often to people from African or Caribbean families, as well as people from South Asian countries such as India, Pakistan and Bangladesh. If you are from one of these groups, you are more likely to have some risk factors for stroke such as diabetes and high blood pressure. Take a look at our information about these health conditions on page 21.

People from African-Caribbean or Asian ethnic groups should aim for a BMI of 23. See page 11.
Actively reduce your risk

You can help to reduce your risk of a stroke by making some healthy lifestyle choices. Whether it’s your diet, activity levels, smoking or drinking, it’s never too late to make a change.

Get individual advice
Remember, this guide can only give general information. You should always get individual advice about your own health and any treatment you may need from a medical professional such as a GP or pharmacist.

Visit the NHS One You website for information on healthy living nhs.uk/oneyou

Cut down on alcohol
Regularly drinking too much alcohol raises your risk of a stroke. In the UK, the government advises that to keep health risks low, it’s best to drink no more than 14 units a week, and to spread the units over the week. The limit is the same for men and women.

For tips on knowing your limits, or if you are worried about your drinking, visit drinkaware.co.uk.
Stop smoking
Smoking doubles your risk of dying from a stroke. But the minute you quit, your risk of a stroke starts to drop right away. Stopping smoking could be one of the best things you ever do for your health, and there is lots of help available.

To find your local stop-smoking services, look online. You can also call these free helplines: England: 0300 123 1044, Scotland 0800 84 84 84, Wales 0800 085 2219. In Northern Ireland visit want2stop.info.

Local stop-smoking services can offer products like nicotine gum and tablets to reduce cravings. Using e-cigarettes, or vaping, is a popular way of reducing smoking. E-cigarettes are not available on prescription but they might be helpful as part of your stop-smoking plan.

Shisha pipes pass tobacco smoke through water, but they are not harmless. During a shisha session, a smoker inhales around 100 cigarettes-worth of smoke.

Reduce your waist size
Being overweight makes you over 20% more likely to have a stroke, and your risk goes up with your weight. Being obese puts your risk of a stroke up by 64%. Extra weight affects your body in many ways, such as raising the risk of high blood pressure and type 2 diabetes, which are both linked to stroke.

If your waist is larger than 94cm (37 inches) in men, or 80cm (31.5 inches) in women you could be overweight.

BMI, or body mass index, shows whether you are the right weight for your height. Your BMI should be below 25, although people from African/Caribbean and South Asian ethnic groups should aim for a lower BMI of 23. This is because people in these groups are more likely to have conditions like diabetes and high blood pressure.

If you are advised to lose some weight or you want to make some healthy lifestyle changes, you don’t have to do it alone. There are some great resources online such as NHS One You and apps for stopping smoking. Your local pharmacist may be able to help. Your family and friends could give support by encouraging you, or joining in with your healthy eating and exercise plans.

Being physically active reduces your risk of a stroke – and you don’t have to join a gym! See page 18.
How to reduce your risk of a stroke

Eat healthily
There are no secrets to a healthy balanced diet, just a few basic diet guidelines to remember.

Practical support for healthy eating
Shopping and cooking can sometimes be difficult if you have a disability or you’re living on a low income. If you are having financial difficulties after a stroke, see our guide ‘Benefits and financial assistance’. If you need more support with a disability after a stroke, call our Helpline on 0303 3033 100.

Tip: For information on spotting hidden sugars, salt and fat, plus healthy recipe ideas, visit change4life.co.uk.

1. Reduce salt
Eating too much salt can raise your blood pressure, which is a major risk for stroke.

We all need a small amount of salt, but the most salt we should have in a day is about a teaspoon (6g).

In your cooking, you can reduce the amount of salt you use in dishes. Try adding spices to boost flavour instead.

A lot of the salt we eat is hidden in everyday foods, including bread, cereal and processed meats like ham. Ready meals and takeaways are often high in salt too.

Look for the online BMI calculator and the NHS Weight Loss Plan on nhs.uk/loseweight.
2. Reduce your sugar
Having too much sugar can make you gain weight, which increases your risk of stroke and type 2 diabetes.

You should aim to eat no more than seven sugar cubes-worth (30g) of sugar per day. It’s not very much when you know that a can of fizzy drink can have more than nine cubes of sugar.

Just like salt, a lot of sugar is hidden in common foods. And it’s not only sweet food – savoury foods like baked beans and tomato ketchup can be very high in sugar.

Hidden sugars in one serving of some everyday foods
- One sugar cube = 4g sugar

   - Baked beans
   - Cola drink
   - Pasta sauce
   - Muesli

3. Eat less fat
Having a low-fat diet can help with losing weight, which reduces your risk of a stroke.

You can help to reduce your cholesterol by eating less saturated fat and replacing it with a small amount of unsaturated fat. But if you have high cholesterol you may need medication, so visit your GP.

Saturated fat is often a solid fat, such as butter. You’ll find it in foods like cheese, cakes, fatty meat and sausages, as well as coconut oil and palm oil.

Unsaturated fat is often an oil, such as olive oil or groundnut oil. It’s also in oily fish like salmon and sardines, and other foods like peanut butter, avocados, nuts and seeds.

For cooking, try replacing saturated (hard) fats like butter and coconut oil with small amounts of olive oil or groundnut oil.

4. Boost your fibre
Going for foods with lots of fibre can help with weight loss, diabetes and heart health, which can reduce your stroke risk. Eating plenty of vegetables and fruit is a great way to get more fibre. Choose whole grains in foods like bread, pasta and rice. Eat the peel on things like potatoes and apples. Oats, nuts and seeds can also boost your daily fibre intake.
5. Balance your diet

Across the day, try to eat something from each of the food groups below. Home-made food is often the best option because you know it's made with fresh ingredients, and it has much less fat, salt or sugar than ready-made food.

- **Carbohydrates**
- **Fat**
- **Dairy foods**
- **Protein**
- **Fruit and vegetables**

**Fruit and vegetables**: aim for five a day. Remember that tinned and frozen fruit and veg count. Go for a colourful variety of vegetables on your plate. These can make up about a third of your food each day.

**Carbohydrates** like potatoes, rice, bread and pasta can make up about a third of what you eat.

**Protein** comes from lean meat, fish and eggs. Non-animal protein could be dried beans, lentils and nuts.

**Dairy** foods like milk, cheese and yoghurt provide calcium, to help keep bones strong. Try choosing lower-fat varieties.

**Fat** contains the most calories per gram so you need very little. Try to use unsaturated fats like olive oil instead of solid fats like butter and coconut oil.
Be as active as you can
Being physically active can help to reduce your risk of a stroke. Moving around can also help your emotional wellbeing by releasing chemicals into your brain that make you feel better.

If you are able to increase your levels of physical activity, it can make a difference to your health and wellbeing. For some people, staying active could mean walking around the room, and for others it means joining a fitness class or doing some gardening.

Don’t forget, the Stroke Association offers a very successful series of fundraising runs, walks and bike rides. If you’re able to walk, run or cycle, why not make one of our fun events a goal for yourself?

Swallowing difficulties after a stroke
If you have trouble swallowing after a stroke, you should have support from a dietitian or speech and language therapist to help you eat safely. A dietitian can advise on making safe and tasty food, and taking part in family meals. For more information see our guide ‘Dealing with swallowing problems’.

Illegal drug use
People may use illegal drugs without knowing about the risk of stroke. Drugs such as cocaine can raise the risk of a stroke in the days after using them. Others, like cannabis, heroin and khat, are also linked with an increased risk and higher death rate from stroke.

More help and information
The drugs advice organisation FRANK provides information and confidential advice about drugs to users, their friends and family. Visit talktofrank.com or call 03001 236 600. Our Stroke Helpline can also advise you on ways to get help.

Having an active, healthy lifestyle and treating your medical problems can also help reduce your risk of heart disease, dementia and cancer.
Treat your health conditions

If you have a health condition linked to stroke, sticking to your treatment can help you reduce your risk. If you have had a stroke or TIA, one of the best ways to reduce your risk of another stroke is to follow the treatment for your health conditions advised by doctors.

How to get your health checked
All the health conditions listed here can happen to you at any age. So even if you feel in good health, get a regular health check.

In England, people aged 40-74 can have the NHS Health Check, which looks for early signs of health problems including stroke risk.

If you’re worried about your health, go to your nurse or GP. A local pharmacist can also give advice and do some health checks.
High blood pressure

High blood pressure plays a part in half of all strokes so it’s the biggest single risk factor for stroke.

What is it?
Your heart pumps blood through your blood vessels. When the blood presses too hard against the walls of the blood vessels, this is known as high blood pressure. It’s also called hypertension.

Why is it a risk?
High blood pressure can lead to clots forming, or cause bleeding in the brain. High blood pressure can also increase the risk of heart attacks, dementia and kidney failure.

How do I know I have it?
It usually has no symptoms, so get your blood pressure checked regularly. You can get this done at your GP surgery or pharmacy. Blood pressure monitors are also available to buy. To find a local Stroke Association Know Your Blood Pressure event for a free and easy blood pressure check, visit stroke.org.uk/kybp.

What can I do about it?
If you are diagnosed with high blood pressure, making some healthy lifestyle changes can help, and you may need some medication. If you are advised to take tablets it is very important to take them regularly.
Atrial fibrillation (AF)

If you have untreated atrial fibrillation (AF), your risk of a stroke is up to five times higher, and a stroke can be more severe if you have AF.

What is it?
In AF your heartbeat is irregular and may be abnormally fast.

Why is it a risk?
The heart might not empty itself of blood at each beat, and a clot can form in the blood left behind. The clot can travel to the brain and cause a stroke.

How do I know I have it?
You might feel your heart racing, but most people don’t get any symptoms. A GP or nurse can check you and send you for further tests.

What can I do about it?
If you have AF and your GP or nurse finds that your stroke risk score is high, you will be given an anticoagulant drug to reduce your risk of a stroke. It’s important to keep taking the anticoagulants to keep your stroke risk lowered.

Diabetes

Having diabetes almost doubles your risk of a stroke.

What is it?
Diabetes means that your body can’t take the sugar out of your blood properly.

Why is it a risk?
Too much sugar in your blood can lead to damage to the blood vessels and nerves. This increases the risk of having a stroke. It can also lead to heart attacks, vision loss and kidney problems.

How do I know I have it?
You might not have any symptoms, but diabetes can make you need to wee more often, and feel very tired and thirsty. A blood test can confirm if you have diabetes or pre-diabetes. For more information about the symptoms of type 1 and type 2 diabetes, visit nhs.uk/diabetes.

What can I do about it?
People with type 1 diabetes generally need insulin treatment. Some people with type 2 diabetes only need to make changes to their diet, while others need drugs or insulin treatment. Treating your diabetes and making healthy lifestyle choices, such as losing weight if you need to, can help you reduce your risk of a stroke.
How to reduce your risk of a stroke

High cholesterol

High cholesterol doesn’t usually have any symptoms, but it’s a major risk factor for stroke.

What is it?
Cholesterol is a vital substance in our bodies, but if there is too much cholesterol in your blood it can cause heart disease and stroke.

Why is it a risk?
Excess cholesterol in your blood can make the blood vessels clogged up and narrowed (atherosclerosis). It can lead to a clot forming and causing a stroke.

How do I know I have it?
A blood test from your GP or pharmacist.

What can I do about it?
Your cholesterol result can be used to calculate your risk of having a stroke. If your risk is high, you can try making lifestyle changes such as losing weight, being more active and eating healthily.

Drugs called statins are often given for high cholesterol, and have been shown to reduce the chances of a stroke.

Some people are born with high cholesterol. This is an inherited condition called familial hypercholesterolaemia. It can lead to people dying in their 20s or 30s, so it’s vital to get tested if you know of early deaths from heart disease or stroke in your family. It can be treated with cholesterol-lowering drugs.
Other health conditions linked to stroke

**Sickle cell disease (SCD)**
A quarter of people with sickle cell disease (SCD) have a stroke before the age of 45. SCD mainly affects people of African, African-Caribbean, Asian and Mediterranean heritage. It raises the risk of a stroke because the red blood cells change shape, making them more likely to form clots.

In the UK, SCD is usually diagnosed during pregnancy or soon after birth with a blood test. The main treatment to reduce the risk of a stroke is regular blood transfusions. For information and support on SCD contact the Sickle Cell Society sicklecellsociety.org.

**Stress, anxiety and depression**
You can be at higher risk of stroke if you experience stress, anxiety or depression. It’s not known why this is, but one reason could be that it’s harder to look after your health if you are depressed or under a lot of pressure. Try to find support for any emotional problems from friends or professionals, and think about healthy lifestyle choices that could help your wellbeing.

**Obstructive sleep apnoea (OSA)**
A sleep disorder called obstructive sleep apnoea (OSA) is linked to stroke. OSA interrupts your breathing during sleep. Some people with OSA snore, but not all. You might wake up a lot at night, and feel very sleepy in the daytime. Speak to your GP if you think you have OSA.

Women’s contraception and hormone treatment

Some oral contraceptives and hormone replacement therapy (HRT) can cause a higher risk of stroke in women. Your doctor should assess your stroke risk before giving you these treatments. If you have high blood pressure, get migraines or have had a previous blood clot or stroke, you may not be eligible.

Smoking, being overweight, or over 35 years old, can also increase your risk of having a stroke while taking the pill or HRT.

Overall, the risk of stroke from contraception or HRT is low, so if you are worried, don’t stop any treatment until you can talk to your GP or nurse. Ask them about your own risk, and the best contraception or hormone treatment for you.
How to reduce your risk of a stroke

About stroke

A stroke is a brain attack. It happens when the blood supply to part of the brain is cut off, killing brain cells. Damage to the brain can affect how the body works. It can also change how you think and feel.

There are two main types of stroke

1. Ischaemic: due to a blocked blood vessel in the brain.
2. Haemorrhagic: due to bleeding in or around the brain.

Ischaemic stroke is often referred to as a clot. Haemorrhagic stroke is often called a bleed.
Spotting the signs of a stroke

It’s important to know how to spot the common signs of a stroke in yourself or someone else. Using the FAST test is the best way to do this.

FAST Test

**F**
Face
Can the person smile? Has their face fallen on one side?

**A**
Arms
Can the person raise both arms and keep them there?

**S**
Speech problems
Can the person speak clearly and understand what you say? Is their speech slurred?

**T**
Time
If you see any of these three signs, it’s time to call 999.

The FAST test helps to spot the three most common symptoms of stroke. But there are other signs that you should always take seriously. These include:

- sudden weakness or numbness on one side of the body, including legs, hands or feet
- difficulty finding words or speaking in clear sentences
- sudden blurred vision or loss of sight in one or both eyes
- sudden memory loss or confusion, and dizziness or a sudden fall.
- a sudden, severe headache.

Strokede can happen to anyone, at any age. Every second counts. If you spot any of these signs of a stroke, don’t wait. Call 999 straight away.

TIA, or transient ischaemic attack

A TIA (sometimes known as a mini-stroke) is the same as a stroke, except that symptoms last for a short amount of time. There is no way of knowing whether someone is having a TIA or a full stroke when the symptoms first start, so do not wait. Call 999 straight away.

Treating a stroke emergency

When someone has a suspected stroke, they should be taken to a specialist stroke unit in a hospital by ambulance. It’s vital to get stroke treatment as soon as possible. Clot-busting and clot-removal treatments need to be given within a few hours of the stroke, so if you suspect a stroke, call 999 straight away.
Where to get help and information

Our Stroke Helpline is for anyone affected by a stroke, including family, friends and carers. The Helpline can give you information and support on any aspect of stroke.

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

Read our information
Find out more about stroke and how to reduce your risk at stroke.org.uk.

Talk to others affected by stroke
There may be a stroke group in your local area where you can meet other stroke survivors. Find your local group at stroke.org.uk/support or call our Helpline.

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.

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
Please be aware that this information is not intended as a substitute for specialist professional advice tailored to your situation. We strive to ensure that the content we provide is accurate and up-to-date, but information can change over time. So far as is permitted by law, the Stroke Association does not accept any liability in relation to the use of the information in this publication, or any third-party information or websites included or referred to.

We would like to thank Legal and General for funding the cost of printing this guide. The Stroke Association keeps full independent control over all content.
When stroke strikes, part of your brain shuts down. And so does a part of you. Life changes instantly and recovery is tough. But the brain can adapt. Our specialist support, research and campaigning are only possible with the courage and determination of the stroke community. With more donations and support from you, we can rebuild even more lives.

Donate or find out more at stroke.org.uk

Contact us

We’re here for you. Contact us for expert information and support by phone, email and online.
Stroke Helpline: 0303 3033 100
From a textphone: 18001 0303 3033 100
Email: helpline@stroke.org.uk
Website: stroke.org.uk

Rebuilding lives after stroke

© Stroke Association 2019
Version 2. Published April 2019
To be reviewed: April 2021
Item code: A01L14

The Stroke Association is registered as a charity in England and Wales (No 211015) and in Scotland (SC037789). Also registered in Northern Ireland (XT33805), Isle of Man (No 945) and Jersey (NPO 369).