

Transient ischaemic attack (TIA)

A TIA is the same as a stroke, but the symptoms last a short time.

You get stroke symptoms because a clot is blocking the blood supply in your brain. When the clot moves away, the stroke symptoms stop.



Ischaemic stroke due to a blocked blood vessel in the brain.



You might feel like you're fine afterwards, but it's vital to get medical help right away. Call **999** as soon as symptoms start. If it happened some time ago, get an urgent appointment with a GP.

Why is it urgent?

Having a TIA is a warning that you are at risk of having a stroke. The risk is greatest in the first days and weeks after a TIA.

Why did it happen?

Clots in the brain can happen for different reasons, and doctors treat you to reduce the risk of another clot happening. Doctors also look for risk factors like high blood pressure or smoking. They will give you the treatment and advice you need. See **page 7** for more information.

Will I have a stroke?

It's difficult to tell for sure if someone is going to have a stroke after a TIA. But having a TIA is a major sign that you have a much higher than normal risk of having a stroke. That's why doctors work so hard to find out what caused it, and help you improve your health. And by following treatments and making healthy lifestyle changes, you can actively reduce your risk of a stroke.



Your risk of a stroke goes down over time following a TIA. So by looking after your health, you can give yourself the best possible chance of staying well in the long term.

Do not drive after a TIA

After a TIA, by law you must not drive for a month. See our guide 'Driving and stroke' or call our Helpline for more information.

Spot the signs of TIA

A TIA has the same main symptoms as a stroke. Use the FAST test:

Your face has dropped on one side.



A

You can't raise both arms together and keep them there.



S

Your speech is slurred.



It's time to call 999.



There are other common signs of TIA and stroke. They include:

- Sudden weakness on one side in your arms, hands or legs.
- Sudden blurred vision or loss of sight in one or both eyes.
- Sudden memory loss or confusion.
- Dizziness or a sudden fall.

A TIA is a medical emergency, the same as a stroke. If you spot the signs of a TIA or stroke, call 999. Don't wait to see if the symptoms pass.

If you didn't get medical help right away, get an urgent appointment with your GP or go to an NHS urgent treatment centre. You need to get your symptoms checked as soon as possible.





What happens next?

If you call **999** with stroke symptoms, you should be taken to hospital. If you go to your GP after TIA symptoms, they can refer you to hospital for an assessment. If a TIA is suspected, you will be given aspirin to reduce the risk of a stroke.

Seeing a specialist

A GP or paramedic will ask you about what happened. If they think you may have had a TIA, they will arrange for you to see a specialist doctor or nurse within 24 hours of your symptoms.

Your appointment with a specialist might be at a TIA clinic, or in a hospital stroke unit. If a TIA is confirmed, doctors will try to find out how it happened. You will be given treatment and advice to reduce your risk of having a stroke in future.

How TIA is diagnosed

The most important information for confirming a TIA is your story about the symptoms and when they happened. Symptoms can be caused by other problems, so the specialist doctor or nurse will listen carefully to you and confirm if you have had a TIA. You may have a brain scan, but not everyone needs a scan.

You will have tests for health problems linked to stroke, such as high blood pressure, high cholesterol and diabetes. You might have heart monitoring to check for heart conditions. You might have an ultrasound scan to check for blocked arteries in your neck.

Why didn't I have a brain scan?

A TIA is a temporary clot in your brain, so it doesn't always cause damage that would show up on a scan.

If doctors are not sure what caused your symptoms, you may have a magnetic resonance imaging scan (MRI). This can rule out other causes of the symptoms, such as bleeds or abnormalities in the brain. An MRI can sometimes show the site of the TIA, especially if it's done soon after it happens. But this is not the main way that a TIA is diagnosed.

How does a TIA happen?

Clots that cause a TIA can happen for different reasons. One type of clot is caused by a build-up of fatty deposits in the blood vessels around your body, known as atherosclerosis. Another type of clot is due to heart conditions such as atrial fibrillation (a type of irregular heartbeat). This can lead to a clot forming in the heart and travelling to the brain.

Damage to the arteries in the neck, known as arterial dissection, can also cause clots. Small vessel disease is a condition where the tiny blood vessels deep inside your brain get blocked. This can also lead to clots forming and causing a TIA or stroke.

Treatments to reduce the risk of another clot

Having a TIA means that you had a temporary clot in your brain, giving you stroke symptoms. TIA treatments aim to reduce the chance of another clot entering your brain.

Blood-thinning medication

You will be offered a type of blood-thinning medication to reduce the risk of another clot. If your clot was due to high blood pressure, or clogged arteries due to fatty deposits (atherosclerosis), you will be given anti-platelet medication. This makes the sticky particles in your blood less likely to clump together and form clots.

If the clot came from the heart because of a condition like atrial fibrillation, you may be given an anticoagulant. This slows down the formation of clots in your blood.

Treating blocked arteries in the neck

If you have a blocked artery in your neck (carotid artery) you might be offered surgery to clear the blockage.

Treating arterial dissection

If you have a damaged artery in the neck, known as an arterial dissection, you will be given blood-thinning medication to take while the artery heals. Arterial dissection is often due to an injury, and it's more common in younger adults and children.

Risk factors for TIA and stroke

Age

Around a third of people with TIA and stroke are of working age. Getting older makes you more at risk of having a TIA or stroke, but it can happen to anyone, at any age.

Lifestyle

Stroke risk can be increased by things we do in everyday life, including:

- Smoking.
- Being overweight.
- · Regularly drinking too much alcohol.
- · Not being active.
- Eating unhealthy food.

See **page 14** for practical advice about healthy lifestyle changes.

Family history

You are more likely to have a TIA or stroke if a close family member has had one.

Ethnicity

People from some ethnic groups, such as South Asian and African and Caribbean people, also have a higher risk of stroke or some of the risk factors linked to stroke.

Health conditions linked to TIA

High blood pressure

High blood pressure is the biggest single risk factor for TIA and stroke, and it plays a part in half of all strokes. It doesn't have any symptoms so you might not know you have it. By treating high blood pressure, you can significantly reduce your risk of a stroke. You might need medication, and you can also help improve your blood pressure through exercise and heathy eating.

It can take a while to adjust to new blood pressure medications, so give it some time, and speak to your pharmacist or GP if you need any support.

Atrial fibrillation (AF)

Atrial fibrillation (AF) is a heart condition that causes an irregular or abnormally fast heartbeat. It means that the heart doesn't always empty itself of blood at each beat. A clot can form in the heart and travel to the brain, causing a stroke.

AF can come and go, so you might need home monitoring to diagnose it. You can also use a fitness tracking device to help keep an eye on your heart rate, so speak to your GP or hospital doctor to discuss this.

If you're diagnosed with AF, you can have treatment to normalise your heartbeat, and blood-thinning medication to reduce the chance of clots forming.



Diabetes

Diabetes causes high levels of sugar in your blood. Over time this damages the blood vessels, which can lead to clots forming. Type 2 diabetes is the most common, and it is more likely to happen if you are overweight. You might need medication. But you can also help control your blood sugar through healthy eating, losing weight if you need to, and being active.

High cholesterol

Cholesterol is a vital substance in our bodies, but if there is too much cholesterol in your blood it can damage the blood vessels. Cholesterol and other substances can clog up the arteries with fatty deposits. If you have high cholesterol, you will be given statin medication to reduce your risk of a stroke. Some people find they don't feel well taking statins. If this happens to you, speak to your pharmacist or GP. They can support you or find another type of medication that suits you. You can also lower your cholesterol levels by eating a healthy diet, and being as active as possible.

How to reduce your risk of a stroke

Follow the treatments for your health conditions

If you have been diagnosed with a health condition following a TIA, such as high blood pressure or atrial fibrillation, you will be offered medication and advice. Taking your medication is a really important way to cut your risk of a stroke.



Managing new medications

After a TIA you might need to start taking one or more types of long-term medication. It can take a while to get used to some types of drug, and you might need to try different versions to find one that suits you.

If you have any problems like side effects or forgetting to take your medication, have a chat with your pharmacist. And don't stop any medications before speaking to a GP. Some medicines can cause side effects if you stop suddenly, and stopping a drug will increase your risk of clots forming.



Seek support

People often need treatment for several different health conditions at the same time. For example, after a stroke you might need to take statins, blood-thinners and high blood pressure medications. These treatments are usually long-term. On top of that, you might be trying to make lifestyle changes such as giving up smoking or losing weight.

This might feel like a lot to deal with. So if you are struggling with things like managing your medications and changing your diet, try to seek support for yourself. This could mean sharing your feelings with family and friends. They might be able to help by joining in with your plans for healthy lifestyle changes, or give practical support with taking multiple medications.

Your pharmacist and GP can support you with taking medications. You can ask for a medications review to check you are on the right type of drugs and taking them in the right way.

You can get some practical advice and support from other people on the Stroke Association's online tool, My Stroke Guide. Register free to get information about stroke and meet others affected by stroke and TIA at mystrokeguide.com.



Be as active as you can

Moving around more and being as active as you can every day will make a big difference to your health and wellbeing. You don't have to join an organized fitness activity like the gym. But people tell us that doing things with other people helps them get motivated. Going for a walk with a friend, or a family visit to the park can help you start to enjoy being more active and increase your confidence.

Walking, dancing, housework, gardening and swimming all get your body moving and help strengthen your heart and lungs. Start slowly, and build up the amount you move bit by bit.

Being physically active has all sorts of benefits, including lowering blood pressure, reducing cholesterol and controlling blood sugar. On top of that it can make you feel good and help you deal with low moods and anxiety.

Is exercise safe?

Moving more and being as active as you can is one of the best ways to reduce your risk of a stroke. On the whole, exercise and activity is safe, and can really help your health and wellbeing.

The only exception is if you have extremely high blood pressure, or another health problem that could cause an injury or illness. If you are not sure about this, always check with your GP before starting to do more exercise.

For more practical tips and ideas about being active, visit **stroke.org.uk**.

Eat a healthy diet

A healthy diet with plenty of fruit and vegetables can lower your risk of stroke by helping you manage health problems linked to stroke, like diabetes and high cholesterol. You don't have to change your diet all at once – try adding a piece of fruit or vegetable each day, like a banana or tomatoes with lunch. Having fresh and home-made food can cut your salt intake, and reduce your blood pressure.

Aim for a healthy bodyweight

TIA and stroke can happen to people of any body size and shape. But having more body fat raises your risk, and reducing your weight if you need to can make you less likely to have a stroke.

Losing weight can reduce high blood pressure and improve diabetes. It can also lower your cholesterol. You may even be able to reduce or stop taking certain medications. So if you lose weight, go back to your GP to discuss your health and medication.

Having a good diet and being active can help you stay a healthy weight. But many people find it's helpful to have some support such as a club or using a weight-loss app. Speak to your local pharmacist about help available locally.



Quit smoking

If you're a smoker, quitting smoking is likely to be the first piece of advice you get after a TIA.

Smoking doubles your risk of dying from a stroke. But as soon as you quit, your risk of a stroke starts to drop right away. So stopping smoking could be one of the best things you can do for your own health.

You don't have to do it alone. Help is available for giving up, including nicotine replacement products on prescription and the Stoptober app. Talk to your GP or pharmacist to find out about local stop-smoking services. There might be a local face-to-face support service you can access.

Reduce drinking

Regularly drinking too much alcohol raises your risk of a stroke. It raises your blood pressure, especially if you drink a lot in one go. Regularly drinking large amounts over time can lead to high blood pressure. Cutting back on alcohol could help you lower your blood pressure, and avoid clots forming.

The UK safe limit for alcohol is 14 units a week. It's the same limit for men and women. If you feel you are drinking too much, look for some advice on cutting down. There are resources online at drinkaware.co.uk and your GP can advise you about help available locally.



TIA: people say...

I feel fine now. I'm too busy to attend my TIA appointment.

Even if you feel ok, a TIA is a major warning sign of a stroke. Attending a TIA clinic and follow-up appointments can tell you what caused the TIA. You will get treatment and advice to help you reduce your risk of a stroke, and stay fit and well. So try to give your appointments top priority.

I'm worried about what I might find out at the TIA appointment.

It can be very worrying to be told that you had a TIA. But by attending medical appointments and following any treatment and advice, you have a chance to make a real difference to your future health.

I don't like to bother anyone.

Medical professionals are trained to investigate symptoms of stroke. They can reassure you, or give medical help if you need it.

"I felt less anxious once I understood what a TIA was and what actions I could take to reduce the risk of this happening again."

Why am I taking medication? It isn't doing anything.

After a TIA you are likely to be given at least one type of long-term medication, and possibly two or more.

Most of the conditions linked to stroke such as having clogged arteries or high blood pressure don't have any symptoms, or very few. So when you start taking medication, it probably won't have a noticeable effect on how you feel physically.

But taking these medications could significantly cut your chance of a stroke.

If you are struggling with taking any of your medicines due to side effects or practical difficulties, speak to your pharmacist or GP. Don't stop taking a medicine without speaking to your GP, as this could raise your risk of a stroke.

"[When] I spoke to my GP about the medication, I realised how important it was that I took it every day to reduce the chance of me having another TIA or a stroke."

TIA of unknown cause

Sometimes, doctors can't find out exactly what caused a TIA. You will be checked for the main risk factors for stroke such as high blood pressure, diabetes, blocked arteries and atrial fibrillation (a type of irregular heartbeat).

Treating a TIA of unknown cause

Even if the cause of a TIA isn't found, you will probably be given the same treatment used for any TIA, which is usually blood-thinning medication to avoid another clot. If you have high blood pressure, diabetes or high cholesterol you will be offered treatment for those conditions too.

Stay healthy and reduce your risk

Like anyone with a TIA, you can help to improve your health by sticking to your medications as well as having a healthy diet and being active. If you aren't usually very active, you can find out about ways to start moving more in our guide 'Getting active after a stroke'.

If you're already fit and active, try to keep going — it will not only make a stroke less likely, but it will also help you stay healthy and improve your mood. If you need to make some lifestyle changes like quitting smoking or losing weight, ask your GP or pharmacist about the help that's available in your local area.



Long-term effects of a TIA

Fatigue

Although the physical signs of a TIA end quickly, it can have some long-term effects. Some people get fatigue (extreme tiredness which doesn't always get better with rest). This could affect you going back to work after a TIA, or limit how much you can do around the house.

You might need to discuss things with your employer and family. Make them aware of how you are feeling, and any support you might need. You can read more in our guide 'Fatigue after stroke.'

Emotional impact

A TIA can have an emotional impact. You could feel very shocked, and you might feel worried about your health. Some people have problems with anxiety and low mood. Sharing your feelings with family and friends can help them understand what you are going through. Talking about your feelings can also help reduce anxiety and help you deal with what you are going through.

Focus on your wellbeing

By following any treatment and making some healthy lifestyle changes you'll be helping your general health and wellbeing. Doing things like quitting smoking, eating healthy food and moving more make you feel better in yourself. You'll also know that you are doing all you can to improve your health and reduce your risk of a stroke.

If your feel that anxiety or low mood is affecting your daily life, contact your GP, or call our Helpline for ideas on finding support.



What to do about other problems

If you still have physical or cognitive problems (difficulties with memory and thinking) after a TIA, raise this at a clinic appointment or with your GP, as you might need some further investigations.

Where to get help and information

From the Stroke Association

Helpline

Our Helpline offers information and support for anyone affected by TIA and stroke. This includes 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

AF Association

Website: heartrhythmalliance.org/afa/uk Provides information and support for people with atrial fibrillation.

Blood Pressure UK

Website: bloodpressureuk.org

Tel: 020 7882 6218

Email: help@bloodpressureuk.org

Help and information about reducing and managing

high blood pressure.

British Heart Foundation

Website: bhf.org.uk

Heart Helpline: 0300 330 3311

Helpline run by cardiac nurses, plus information and

advice on all aspects of heart health.

Chest, Heart and Stroke Scotland

Website: chss.org.uk Helpline: 0808 801 0899

Advice line staffed by nurses, and information and practical support for people with stroke and TIA living

in Scotland.

Diabetes UK

Website: diabetes.org.uk Careline: 0345 123 2399

Information and support for living well with diabetes.

Driver and Vehicle Licensing Agency (DVLA) Drivers Medical Group (England, Scotland, Wales)

Website: gov.uk/dvla

Driver and Vehicle Agency (DVA) (Northern Ireland)

Website: nidirect.gov.uk

Where to find information on driving after TIA and stroke in England, Scotland and Wales (DVLA) and Northern Ireland (DVA)

Heart UK

Website: heartuk.org.uk Helpline: 0345 450 5988 Email: ask@heartuk.org.uk

Specialist cholesterol charity, with a helpline run by specialist nurses and dietitians and advice in Punjabi,

Urdu and Hindi on Tuesdays.

NHS Smokefree

Website: nhs.uk/smokefree

Use an app, get information or find local support for

quitting smoking.

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.

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



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