

Transient ischaemic attack (TIA)

A transient ischaemic attack or TIA (also known as a mini-stroke) is the same as a stroke, except that the symptoms last for a short amount of time. This guide explains what the symptoms are, what you should do if you have them and how a TIA is diagnosed and treated.

What is a TIA?

A TIA is the same as a stroke, except that symptoms only last for a short amount of time. In a TIA, a blood vessel in the brain gets blocked, but the blockage clears by itself. TIA is also known as a mini-stroke and some people think of it as a 'funny turn'. But a TIA is a major warning sign of a stroke.

Spotting the signs of a stroke

FAST test



Face

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



Arms

Can the person raise both arms and keep them there?



Speech

Can the person speak clearly and understand what you say? Is their speech slurred?



Time

If you see any of these three signs, it's time to call **999**.

The FAST test (left) helps to spot the three most common signs of stroke or TIA. But there are others 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 or in one or both eyes
- sudden memory loss or confusion, and dizziness or a sudden fall
- a sudden, severe headache.

Stroke 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.

There is no way of knowing whether you are having a TIA or a full stroke when the symptoms first start. If you, or someone else, show any of the signs of stroke or TIA you must call **999**.

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If you think you have had a TIA some time in the past and have not yet sought medical attention, see your GP urgently.

Some of these symptoms can be caused by other things such as low blood sugar, a migraine, an inner ear problem or a seizure. However, you cannot be sure of the cause until your symptoms are investigated by a doctor.

What causes a TIA?

Like a stroke, a TIA is caused by a blockage cutting off the blood supply to part of your brain. The only difference when you have a TIA is that the blockage is temporary – it either dissolves on its own or moves, so that the blood supply returns to normal and your symptoms disappear.

The blockage is usually a blood clot, although rarely it can be caused by other things, such as a piece of fatty debris or an air bubble in your blood stream.

Blood clots may form in areas where your arteries have become narrowed or 'furred up' by fatty deposits. This process is called atherosclerosis. If you have a heart condition, such as atrial fibrillation, blood clots can form in the heart and move up into your brain.

Some strokes and TIAs are caused by small vessel disease, which involves damage to the tiny blood vessels within the brain. Deposits collect in the blood vessels, causing them to thicken. If they become completely blocked, this can lead to a stroke or TIA. Symptoms of a TIA can sometimes be caused by bleeding in your brain (called a haemorrhage), but this is unusual.

Sometimes people have a TIA that affects their vision. This can happen when a blood vessel leading directly to your eye becomes blocked and causes a temporary loss of vision. This is sometimes called amaurosis fugax or transient monocular blindness. People often describe it as feeling like a curtain has fallen over one eye. It can also happen when the visual parts of your brain are affected, leading to vision loss in one or both eyes, or on one side, or double vision.

How is a TIA diagnosed and treated?

Initial assessment

A TIA is diagnosed with a medical examination, and in many cases a brain scan. Reasons why you might be offered a brain scan include:

- it is suspected that the TIA is caused by a haemorrhage
- the doctor needs to determine the position of the TIA in the brain
- the symptoms have been prolonged and therefore a stroke rather than TIA is suspected
- another cause for your symptoms other than TIA is suspected
- you are taking anticoagulants.

If you have a suspected TIA you should either be referred straight away to a TIA clinic or seen by a stroke specialist. In most cases you should see a stroke specialist within 24 hours.

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Everyone who has a TIA is at an increased risk of stroke, so it's important to ask your doctor to explain your own risk, and what you should do to reduce it. As many as four out of five strokes can be prevented after TIA if the correct tests and treatments are carried out. For information and practical tips on reducing your risk of a stroke, read our guide L14, *How to reduce your risk of a stroke*.

Treatments to reduce your risk

It is likely that the doctor will give you aspirin to take until you see a stroke specialist. This will help to prevent blood clots forming.

Assessment with a specialist

Usually you will be referred to a consultant neurologist (a doctor who specialises in conditions that affect the brain and spine), or a consultant stroke specialist for further assessment. Many hospitals and some GP surgeries have specialist TIA or stroke clinics, so you may be referred to one of these.

If the specialist suspects that you have had a TIA or perhaps that your symptoms are caused by something else he or she may want you to have a brain scan. You will either have a computed tomography (CT) scan or a magnetic resonance imaging (MRI) scan. Both of these produce pictures of your brain and will help doctors to rule out other causes of your symptoms.

You may also be offered some of the following tests and checks:

- electrocardiogram (ECG): checks the heartbeat
- Doppler ultrasound: checks for blockages and narrowing of the neck arteries
- blood pressure measurement.

Your blood will be checked for:

- blood clotting
- blood sugar
- cholesterol levels.

If you are diagnosed with a TIA your specialist should talk to you about the factors that are increasing your risk of stroke and what you can do about them. This may mean taking medication or making changes to your lifestyle, such as stopping smoking, exercising more and drinking less alcohol, or both.

In some clinics you may also see a clinical nurse specialist who can give you further advice. You should be offered a follow-up assessment if you need it.

What impact will this have on my life?

Although the physical symptoms usually disappear quickly, the impact of a TIA can last much longer.

With the right treatment you should start to feel back to normal quickly and you won't have any lasting effects. If you do notice ongoing problems, such as muscle weakness or effects on your memory, understanding or speech, you need to go to your GP.

Although your TIA shouldn't have a lasting impact on the things you do day-to-day, by law you will have to stop driving for at least one month. Anyone who has had a stroke or TIA has to stop driving immediately, but for many this is just temporary. You do not have to tell the DVLA (or DVA in Northern Ireland), and if your doctor is happy that you have made a good recovery and there are no lasting effects after one month, you can return to driving. The rules for drivers of lorries, buses and coaches are stricter and they are required to tell the DVLA/DVA immediately, and must not drive for one year.

If you have had more than one TIA within a month, you will need to wait for at least three months before you can drive again and you will have to surrender your licence temporarily, until you are considered fit to drive by your doctor. Our guide F02, *Driving after stroke* can tell you more. See *Where to get help and information* later in this guide for details of how to get a copy.

For many people it's the emotional impact of a TIA that lasts the longest. Shock and anger at what has happened, fear of another TIA or stroke, and worry about the effect

it may have on your job or relationships are all natural emotions that many people experience.

It can help to talk to someone who understands. Our Stroke Helpline can offer advice and support, whether it is practical information you're looking for or just someone to listen.

You can also visit our online discussion forum TalkStroke. This is an online community for anyone who has been affected by stroke, where you can share your experiences or concerns, ask questions and receive advice and encouragement from people in similar situations. Take a look at [stroke.org.uk](https://www.stroke.org.uk).

Will I have a stroke if I've had a TIA?

A TIA is a sign that there is a problem with the blood supply to part of your brain, so anyone who has had a TIA is at an increased risk of stroke. The risk is greatest in the days after the TIA, and about half of all strokes that follow a TIA will happen in the first 24 hours, so urgent assessment is essential. One in 12 people who have had a TIA could have a stroke within a week after a TIA.

If your TIA is urgently investigated and the likely causes are treated, your risk of having a stroke can be dramatically reduced.

What can I do to reduce my risk of having another TIA or stroke?

Understanding what factors caused your TIA will help you know how you can reduce your risk of having a stroke, or of another TIA. When you have a TIA, doctors check you for any health conditions linked to stroke. If you have any of these conditions, you will be treated to lower the risk of another attack. These health conditions include:

- high blood pressure
- atrial fibrillation (irregular heartbeat)
- diabetes
- high cholesterol.

One of the best ways to reduce your risk is to carry on with any treatment you are given.

You should be given advice about other ways of reducing your risk of another TIA or stroke. Some people need to lose weight, exercise more, give up smoking or drink less alcohol. All of these actions can also help to manage other health conditions and will often make you feel better.

If you have any questions or concerns about your medication, go back to your doctor or pharmacist and ask. Tell them if you are worried about side effects, as there will often be an alternative that you can take. Never stop taking your medication without talking to your doctor first.

Many people consider having a TIA as a 'wake-up call' and a sign that they need to make some lasting changes to their lifestyle. We have lots of information that can help you do this. Support is always available from your GP practice or local stop-smoking service to stop smoking, if this is relevant to you.

Remember...

A TIA is the same as a stroke, except that the symptoms last for a short amount of time.

Just like a stroke, a TIA is a medical emergency. If you, or someone else, show any signs of stroke you must call **999**.

A TIA is a sign that there is a problem and you are at risk of having a stroke that could cause you considerable harm.

The risk of stroke after a TIA is highest in the first days and weeks, and particularly the first 24 to 48 hours. Seek help urgently.

If you think you have had a TIA and have not sought medical attention, see your GP urgently.

Where to get help and information

From the Stroke Association

Talk to us

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 **info@stroke.org.uk**.

Read our publications

We publish detailed information about a wide range of stroke topics including reducing your risk of a stroke and rehabilitation. Read online at **stroke.org.uk** or call the Helpline to ask for printed copies.

Other sources of help and information

Atrial Fibrillation Association (AFA)

Website: www.heartrhythmalliance.org

Tel: 01789 867 502

Provides information and support for people with atrial fibrillation.

Blood Pressure UK

Website: www.bloodpressureuk.org

Tel: 020 7882 6255

Works to lower the nation's blood pressure and tries to prevent stroke and heart disease.

British Heart Foundation

Website: www.bhf.org.uk

Heart Helpline: 0300 330 3311

Offers a wide range of publications on heart conditions and blood pressure. The helpline is staffed by cardiac nurses who can provide information and support on heart and health issues.

British Nutrition Foundation

Website: www.nutrition.org.uk

Tel: 020 7557 7930

Provides information on nutrition and healthy eating.

Chest, Heart and Stroke Scotland

Website: www.chss.org.uk

Helpline: 0808 801 0899

Provides information on stroke and TIA. It also runs an advice line staffed by nurses.

Diabetes UK

Website: www.diabetes.org.uk

Careline: 0345 123 2399

Provides information and support for people affected by diabetes.

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

Website: www.gov.uk/dvla

Provides information about driving if you have a medical condition. Their leaflet INF188/3, *Car or motorcycle drivers who have had a stroke or transient ischaemic attack (TIA)* outlines the rules about driving after a TIA.

Driver and Vehicle Agency (DVA) (Northern Ireland)

Website: www.nidirect.gov.uk

Provides information on what you need to do if you drive and have a medical condition.

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Heart UK

Website: www.heartuk.org.uk

Helpline: 0345 450 5988

Works to prevent premature deaths caused by high cholesterol. The helpline is staffed by specialist nurses and dietitians.

NHS Choices

Website: www.nhs.uk/livewell

NHS Inform (Scotland)

Website: www.nhsinform.scot

NHS websites providing information about living a healthier lifestyle. The NHS Live Well website offers programmes to help you lose weight, eat better and do more exercise.

NHS Smokefree

Website: www.nhs.uk/smokefree

Provides information and support with stopping smoking

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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.

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We rely on your support to fund life-saving research and vital services for people affected by stroke. Join the fight against stroke now at stroke.org.uk/fundraising
Together we can conquer stroke.

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