

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. If you think you may have had a TIA, or know someone who has, this factsheet explains what the symptoms are, what you should do when 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 the symptoms last for a short amount of time and **no longer than 24 hours**.

Although the symptoms may not last long, **a TIA is still very serious**. It is a sign that there is a problem and you are at risk of having a stroke. More than one in 12 people will have a stroke within a week of having a TIA. Because of this, a TIA is often called a **warning stroke**. So don't ignore it. Get it treated urgently.

What are the symptoms of a TIA?

The **FAST test** (right) can help you to recognise some of the most common symptoms of a stroke or TIA, but other symptoms can also be associated with a TIA. These include:

- sudden loss of vision or blurred vision in one or both eyes
- sudden weakness or numbness on one side of your body (including in your leg)
- sudden memory loss or confusion
- sudden dizziness, unsteadiness or a sudden fall, especially with any of the other symptoms.

Facial weakness
Can the person smile?
Has their mouth or eye drooped?

Arm weakness
Can the person raise both of their arms?

Speech problems
Can the person speak clearly and understand what you say?

Time to call 999

Like a stroke, **a TIA is a medical emergency**. If you see any one of these signs, seek urgent medical help.

What should I do if I have these symptoms?

If you, or someone else, show any of the signs of stroke or TIA you must call 999.

There is no way of knowing whether you are having a TIA or a stroke when the symptoms first start, so you need to seek immediate medical help.

If you think you have had a TIA 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 it can also be caused by other things, such as a piece of fatty debris or an air bubble in your blood stream.

Blood clots 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 **blood clots can form in the heart** and move up into your brain.

Some strokes and TIAs are also caused by **small vessel disease**, which is when the tiny blood vessels within your brain become blocked. Symptoms of a TIA can sometimes be caused by bleeding in your brain (a haemorrhage), but this is very rare.

Occasionally people have a TIA that only affects one of their eyes. This happens when a blood vessel leading directly to your eye becomes blocked and causes a temporary loss of vision. This is called **amaurosis fugax** or **transient monocular blindness**. People often describe it as feeling like a curtain has fallen over one eye.

How is a TIA diagnosed and treated?

Initial assessment

The doctor who carries out your initial assessment will ask you questions about your symptoms and your general health to try to rule out other conditions. If it's suspected that you have had a TIA, you will be referred to a doctor who specialises in stroke (known as a stroke physician) for further assessment and treatment.

The doctor will work out your short-term risk of having a stroke using something called the **ABCD2 scale**. It works by giving you a score for each of the following: age, blood pressure, clinical features (your symptoms), duration of symptoms and diabetes. Risk scores range from zero (low risk) to seven (high risk). The doctor will work out your risk as follows:

Age: you are assigned one point if you are aged 60 or over. This is because your risk of stroke increases with age.

Blood pressure: you are assigned one point if your blood pressure measures 140/90mmHg or higher. This is because high blood pressure increases your risk of stroke.

Clinical features: you are assigned two points if your symptoms include weakness on one side of your body or one point if your symptoms included speech problems without weakness.

Duration of symptoms: you are assigned two points if your symptoms lasted longer than 60 minutes. You are assigned one point if your symptoms lasted less than 60 minutes but more than 10 minutes.

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Diabetes: you are assigned one point if you have diabetes, as this condition increases your risk of stroke.

If your total score is **four points or more**, your risk of stroke is high and you should be seen and **assessed by a stroke specialist within 24 hours** of your symptoms first appearing.

If you have any of the following you will be considered high risk, whatever your ABCD2 score is:

- you have had more than two TIAs within the last week
- you have a heart condition called atrial fibrillation
- you are taking medication to prevent your blood from clotting (anticoagulants)
- one or both of the large arteries in your neck have become narrow (carotid artery disease).

If your score is **three points or below**, your risk is lower and you should be **seen by a stroke specialist within seven days**. If it is more than a week since your TIA, you will usually be considered low risk.

Everyone who has a TIA is at an increased risk of stroke, so even if your risk is not considered high, it's still important that you take immediate action to reduce it.

It is likely that the doctor will give you **aspirin or clopidogrel** to take until you can see a stroke specialist. This will help to prevent your blood from clotting. He or she may also give you medication called **statins** to help lower your cholesterol.

The doctor will also talk to you about any other factors that are increasing your risk of stroke, such as high blood pressure, diabetes or smoking, and what you can do about them.

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. Some hospitals and GP surgeries have specialist TIA or stroke clinics, so you may be referred to one of these. In Scotland they may be called neurovascular clinics.

If the specialist suspects that you have had a TIA he or she may want you to have a **brain scan**. You will either have a computerised 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.

The doctors will also **measure your blood pressure and carry out blood tests** to check for conditions that could have caused your TIA, such as high blood sugar and cholesterol. You may undergo additional tests to check for other conditions that could have contributed to your TIA. These include an electrocardiogram (ECG), which checks for an irregular heartbeat, or a blood vessel scan to check for blockages in the arteries in your neck.

Your specialist should talk to you again 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, or both**.

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In some clinics you may also see a clinical nurse specialist who can give you further advice. It's likely that you'll be asked to return to see your GP, consultant or nurse to monitor your risk.

What impact will this have on my life?

Although the 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 fairly quickly and there won't be any lasting effects. **If you do notice ongoing problems**, such as muscle weakness or effects on your memory or understanding, **you need to go to your GP**.

Although your TIA shouldn't have a lasting impact on the things you do day-to-day, **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. 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.

If, however, you have ongoing problems that your doctor thinks may affect your ability to drive you will have to inform the Driver and Vehicle Licensing Agency (Driver and Vehicle Agency in Northern Ireland). If you have had a number of TIAs over a short period of time you will need to wait until you have not had a TIA for three months before you can drive again. Our factsheet *Driving after stroke (F02)* can tell you more. See *How can I find out more?* for details.

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

Need to talk?

Whatever your concern is, our helpline team can help. Whether you want to know more about stroke and its effects, are looking for practical information and support or simply need someone to talk to, we're here for you.

Call us on **0303 3033 100** or email **info@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 greatest risk of having a stroke is within the first few days after a TIA, which is why it's important to get immediate medical help when you have one.

If your TIA is urgently investigated and treated, your risk can be significantly reduced. It is thought that around 10,000 strokes can be prevented every year in the UK if TIAs and minor strokes are treated in time.

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

If you've had a TIA your risk of having a stroke is increased, but **understanding what factors caused it will help you know how to reduce your risk**.

Certain medical conditions like diabetes and high blood pressure can lead to stroke. If you have a medical condition that is increasing your risk of stroke, make sure you take the medication you're prescribed.

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

Lifestyle factors such as smoking, diet, drinking too much alcohol, being overweight and not doing enough exercise can increase your risk as well.

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.

How can I find out more?

Talk to us

At the Stroke Association, our Stroke Helpline can give you information about stroke and tell you about services and support available in your local area.

Call us on **0303 3033 100** (Monday to Friday, 9am-5pm) or email **info@stroke.org.uk**

Get online

We have lots of information about stroke and how to prevent it on our website. Go to **stroke.org.uk**

Read our publications

We also produce a range of other leaflets and factsheets about stroke and related issues. You can download these for free or order a printed copy to be posted to you via our website **stroke.org.uk** or by calling the helpline on **0303 3033 100**.

Some of our other factsheets include:

- *High blood pressure and stroke (F06)*
- *Atrial fibrillation (AF) and stroke (F26)*
- *Carotid artery disease (F40)*
- *Smoking and the risk of stroke (F19)*
- *Healthy eating and stroke (F08)*
- *Driving after stroke (F02)*

Go to **stroke.org.uk** for a full list

Other useful contacts

If you're looking for more information the following organisations may also be able to help. All are UK wide unless otherwise stated.

Please note that details of these organisations are for information only. We are not recommending or endorsing anyone by including them in this factsheet.

Atrial Fibrillation Association (AFA)

Website: www.atrialfibrillation.org.uk

Tel: 01789 451 837

Email: info@afa.org.uk

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

Publications Order Line:

0870 600 6566

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

Email: postbox@nutrition.org.uk

Provides information on nutrition and healthy eating.

Chest, Heart and Stroke Scotland

Website: www.chss.org.uk

Helpline: 0808 801 0899

Email: advice@chss.org.uk

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

Email: careline@diabetes.org.uk

Provides information and support for people affected by diabetes.

Driver and Vehicle Licensing Agency (DVLA)

(England, Scotland, Wales)

Website: www.gov.uk/dvla

Tel: 0300 790 6806

Email: eftd@dvla.gsi.gov.uk

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.dvani.gov.uk

Tel: 0845 402 4000

Email: dvlni@doeni.gov.uk

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

Heart UK

Website: www.heartuk.org.uk

Helpline: 0845 450 5988

Email: ask@heartuk.org.uk

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

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NHS Choices

Website: www.nhs.uk/livewell

NHS Inform (Scotland)

Website: www.nhsinform.co.uk

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.

How did we do?

Your feedback will help us to improve our publications, making sure that they answer your questions and are easy to understand.

To let us know what you think of this factsheet email us at

feedback@stroke.org.uk

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.

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

About our information

We are committed to producing clear, accurate and unbiased information for stroke survivors, their families and friends. To produce our publications we use information from professional bodies and other reliable sources including NICE, SIGN, Royal College of Physicians, medical journals and textbooks. For a list of all the sources used in this factsheet go to stroke.org.uk

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