

Chest
Heart &
Stroke
Scotland



VISION AFTER STROKE



ESSENTIAL GUIDE

This Essential Guide is about vision after stroke.

It explains:

- how a stroke can affect your vision
- the common vision problems after stroke
- different strategies and techniques that can help
- the law around driving if your vision has been affected by a stroke
- where to find further information and support.

Vision after stroke

Around two-thirds of people who have had a stroke have problems with their vision. These problems are often caused by damage to the pathway that carries information from your eye to the back of your brain where the information is processed.

Changes to your vision can be difficult to adjust to and may mean you have to make changes to your everyday life. They can affect how you manage at home, getting out and about, your work and your relationships.

However, practical and emotional support is available to help you manage and improve your quality of life.

It is recommended that everyone who has had a stroke has their vision tested to check for any problems.

Getting your vision tested

To get your vision tested after a stroke, you may be referred to an eye specialist such as an ophthalmologist or orthoptist.

- An ophthalmologist specialises in the diagnosis and treatment of eye disease and injuries.
- An orthoptist specialises in the assessment of eye disorders such as double vision.

Sometimes changes to your vision can be missed, misunderstood or confused with poor eyesight.

If you notice any changes to your vision, or if your vision has not been tested and you are worried, speak to your GP or a member of your stroke team.



Common vision problems after stroke

Common vision problems include:

- loss of part of your visual field
- problems with processing visual information
- problems with eye movement
- double vision.

Recovery

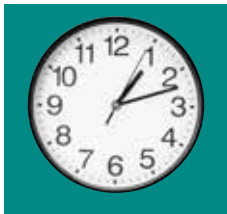
Vision problems after a stroke depend on what part of your brain has been affected.

It is difficult to tell if your vision will go back to normal. For some people, vision problems improve over time. For others, the damage will be long term.

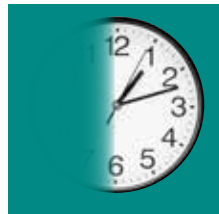
Visual field loss

Your **visual field** is the area you see in front of you and to the side (your peripheral vision) when you look straight ahead.

Visual field loss (called hemianopia) is when you are not able to see either to the right or to the left of the centre of your visual field. It is the most common vision problem after stroke.



Normal vision



Hemianopia

Assessment of your visual field is needed to diagnose visual field loss and how it affects you. This will depend on what part of your brain has been damaged by your stroke.

In most cases, the loss of vision will be of some or all of the visual field on one side in both eyes. This is called 'homonymous hemianopia'. For example, you might have vision loss on the left side of your left eye and the left side of your right eye.

It may be other people who first notice that you don't appear to see things on one side of you. You may find that you bump into things easily or have difficulty reading.

If you have visual field loss, you have to be very careful when doing things like crossing the road. This is because you may not be aware of the cars on your affected side.

Help with visual field loss

Visual scanning training can teach you to pay attention to both sides of your vision. It does this by getting you into the habit of turning your eyes and head left and right.


The training is easy to do and your eye specialist should be able to tell you more about it.

Free online scanning training programmes are also available, for example:

- www.eyesearch.ucl.ac.uk
- www.readright.ucl.ac.uk
- www.dur.ac.uk/psychology/research/drex

You may also be offered **special optical aids** to help. For example, special glasses that reflect images on to your good side of vision.

If visual field loss makes it difficult to read, there are different **strategies and equipment** that can help. For example:

- placing a ruler under each line as you read
- drawing a line down the left-hand side of the page with a marker pen or holding a coloured ruler vertically if you have left visual field problems
-  using a typoscope (a piece of card with a box cut out) to make it easier to focus on one line of text at a time.

With right visual field loss, reading can be more difficult. You can try using markers or a technique called the 'Steady Eye Strategy'. Your eye specialist can show you how the strategy works.

Visual processing and visual neglect

For some people, vision itself can be normal after a stroke but there is a problem with the way their brain processes and makes sense of visual information. For example, you may have difficulty recognising objects or people.

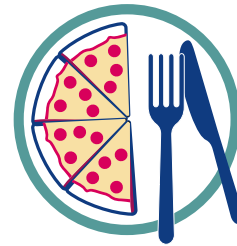
Visual neglect is the most common type of visual processing problem. It is when you are unable to process information related to one side of your body (usually your left).

Visual neglect is different from visual field loss.

Visual neglect: you can see well but you have a lack of awareness to one side, normally the left.

Visual field loss: parts of your vision are missing.

Inattention is a form of visual neglect. It is when people ignore the affected side of their body or anything happening on that side.



People with visual inattention might, for example, shave one side of their face or apply make up to one side of their face only, or eat only what is on one side of their plate.

Visual neglect can occur together with visual field loss or it can occur on its own.

Scanning and awareness strategies are available that can help with visual neglect.

Eye movement

A stroke may cause problems with your eye movements. For example, you may have problems with your 'saccadic' eye movements.

Saccadic eye movements are very fast movements when your eyes jump from one position or object to another.

Your ability to follow moving objects (called 'smooth pursuit' eye movements) can also be affected.

Problems with your eye movements can make it difficult to focus. They can also make activities such as reading or looking around a room difficult.

Problems looking around quickly can also affect your ability to walk around easily, especially outside.

Double vision

Double vision (diplopia) is common when a stroke affects the back of the brain. It can make you feel dizzy and sick and can make you lose your balance.

Double vision can make some activities difficult or unsafe. For example, when making a cup of tea, you may miss pouring water into your cup because you see two of them.

To prevent double vision, frosted tape or 'prism lenses' can be added to your glasses. Prism lenses must be fitted by an eye specialist.

The frosted tape and prism lenses allow double images to be seen as a single image. Some people may experience headaches or confused vision at first when using these aids and you may need training to help you adapt.

Other problems



Sensitivity to bright light

Tinted glasses or sunglasses can help with this.



Dry eyes

You may find using eye drops helps with this. Speak to your doctor or optician about special eye drops for dry eyes.



Difficulties judging depth, distance or space

You may find objects seem closer or further away than they really are.



Visual hallucinations

Seeing things that are not really there can occur after a sudden loss of sight. This condition is called Charles Bonnet Syndrome. Visual hallucinations usually improve or resolve through time.



Balance problems

Vision is important for your balance. Problems with your vision after a stroke can affect your balance. This can cause you to feel dizzy and unsteady on your feet and you may be at increased risk of falls.

Driving

For safety reasons, the Driver and Vehicle Licensing Agency (DVLA) has strict rules about who can and cannot drive.

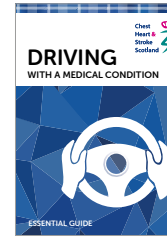
Vision problems following a stroke may mean that you will not be allowed to drive. This may be for a short time only or may be long term. It will depend on how your vision has been affected and what licence you hold.

By law you must tell the DVLA about any medical condition that may affect your ability to drive safely.

Your doctor will be able to let you know if you need to tell the DVLA about your stroke and any vision problems you have as a result of it.

The DVLA website has detailed information on driving after a stroke. To find out more, go to www.gov.uk/stroke-and-driving.

Chest Heart & Stroke Scotland also have an Essential Guide on 'Driving with a medical condition'.



Go to www.chss.org.uk/publications for a copy of this and other guides in our Essential Guides series, or request them from our Advice Line nurses.

Support

Vision problems after a stroke can be scary. Living with vision problems can also affect your confidence and rehabilitation. For these reasons, it is important to get support to help you manage and improve your quality of life.

If you are partially sighted or blind, you will be entitled to certain benefits and services. There may also be local visual-impairment services available to you.

For more information on benefits, services and practical support, contact the **Royal National Institute of Blind People (RNIB)**:

Web: www.rnib.org.uk/scotland

Email: helpline@rnib.org.uk

Tel: 0303 123 9999

Royal Blind (www.royalblind.org) also offer support for partially sighted and blind people in Scotland.



Living with vision problems can make some people feel isolated. This can lead to feelings of anxiety and depression. Speaking to someone about how you feel is an important step to feeling better.

You may choose to speak to a friend or family member, or to your doctor. The RNIB also offer emotional support to anyone affected by sight loss. You can also call the Chest Heart & Stroke Scotland Advice Line nurses for confidential support and information. This includes information on support groups in your area.

The **www.stroke4carers.org** website also provides advice, support and information for informal carers of people who have had a stroke. This includes information and practical advice on vision problems after a stroke.

Our publications are available for free to anyone in Scotland who needs them. Go to www.chss.org.uk/publications 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.

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 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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