

## Vision loss after stroke

### What you need to know

- › About one-third of stroke survivors experience vision loss.
- › Most people who have vision loss after a stroke do not fully recover their vision.
- › Some recovery is possible – this will usually happen in the first few months after a stroke.
- › Training, equipment and home modifications can help you to live as independently and safely as possible.

### Vision loss after stroke

Your vision depends on a healthy eye to receive information and a healthy brain to process that information. The nerves in the eye travel from the eye through the brain to the occipital cortex at the back of the brain, allowing you to see.

Most strokes affect one side of the brain. Nerves from each eye travel together in the brain, so both eyes are affected. If the right side of your brain is damaged, the left side vision in each eye may be affected. It is rare for both sides of the brain to be affected by stroke. When it does happen, it can result in blindness.

### Types of vision loss

#### Visual field loss

Your visual field is the entire area you can see when your eyes are fixed in one position.

Homonymous hemianopia is the loss of one half of the visual field in each eye. You may feel like you are unable to see out of one eye, but in fact, both your eyes are affected. When reading, words and sentences disappear when in the missing visual field. People may appear to have only half a face.

Quadrantanopia is the loss of either the upper or lower quarter of the visual field.



Hemianopia



Quadrantanopia

#### Eye movement control

If the nerves that make your eyes move are damaged, you may not be able to move your eyes to a certain position. A nerve that controls individual eye muscles may stop working, causing eye turning (strabismus) or double vision (diplopia). Other problems with eye nerves can cause an eyelid to droop (ptosis), or the pupil of an eye to become bigger.

## Unsteady movement

Nystagmus is constant, unsteady movement of the eyes. Movement will be jittery and can be side to side, up and down or circular. Your eyes may also flicker when you try to look steadily at something.

## Dry eyes

Problems with the nerves of the eyelid, the facial nerve or the muscles of the eyelid can cause dry eyes.

## Visual neglect and agnosia

People with visual neglect are not aware of, and do not respond to, things on their stroke-affected side. People with visual agnosia have difficulty recognising familiar faces and objects. These difficulties are not related to vision itself – they result from damage to parts of the brain that perceive and interpret vision.

## Management and recovery

Most people who have vision loss after a stroke will not fully recover their vision. Some recovery is possible, usually in the first few months after a stroke. Glasses or contact lenses generally will not help vision loss due to stroke.

Ophthalmologists, orthoptists, doctors and occupational therapists can advise on the best management for you.

Therapy may include training to compensate for the vision loss. This includes scanning techniques which make the most use of your existing vision.

Prism lenses can be used to shift images from the non-seeing to the seeing visual field. If you have double vision, a prism to join the images can be placed on glasses, or an eye patch can help by blocking one image.

You can use eye drops for dry eyes. Your health professional may also recommend taping your eyelids shut, particularly at night. If you have become more sensitive to light (photosensitivity), you can wear sunglasses.

Vision loss can affect your safety and independence. Training, aids, equipment and modifications can help.



The Stroke Foundation partners with the community to prevent, treat and beat stroke. We do this through raising awareness, facilitating research and supporting stroke survivors.

### Contact us

 **StrokeLine 1800 STROKE (1800 787 653)**

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## More help

StrokeLine's health professionals provide information, advice, support and referral. StrokeLine's practical and confidential advice will help you manage your health better and live well.

Call 1800 STROKE (1800 787 653).

Email [strokeline@strokefoundation.org.au](mailto:strokeline@strokefoundation.org.au)

Join Australia's largest stroke community for information and support.

EnableMe: stronger after stroke  
[enableme.org.au](http://enableme.org.au)

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