



Neuro Café:  
Vision & National Eye Health Week  
20<sup>th</sup> September 2023



# NATIONAL EYE HEALTH WEEK

MONDAY 18 – SUNDAY 24 SEPTEMBER 2023

**YOUR VISION MATTERS**

- This year's National Eye Health Week (NEHW) will take place from 18 to 24 September 2023, promoting the importance of good eye health and the need for regular eye tests for all.
- Vision really matters. Sight is the sense people fear losing the most, yet many of us don't know how to look after our eyes – National Eye Health Week aims to change all that!

# Eye Health Calculator



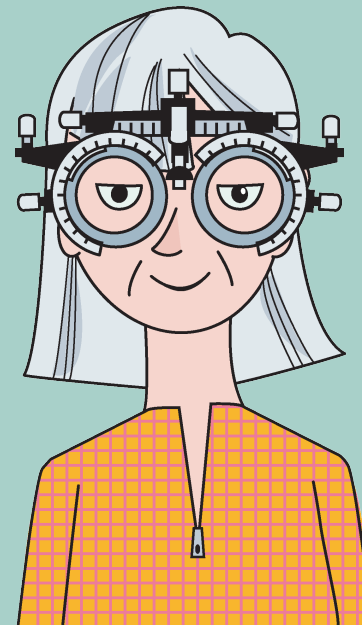
<https://www.visionmatters.org.uk/looking-after-your-eyes/eye-health-calculator>

# HOW'S YOUR SIGHT SEEING?

**Regular eye tests, once every two years unless advised otherwise by your optometrist, are essential health checks for EVERYONE!**

As well as spotting sight threatening eye conditions, routine eye tests can also detect a range of other health issues such as high blood pressure and diabetes.

For more on looking after your eyes visit [visionmatters.org.uk](https://www.visionmatters.org.uk)



National Eye Health Week is a public information campaign run by Eye Health UK (registered charity number 1086146).

# EYE TESTS ARE FREE IF YOU'RE OVER SIXTY!

Our vision declines & the risk of developing a sight threatening eye condition increases as we age.

So it's vital over 60s have regular eye tests, once every two years unless advised otherwise by your optometrist, to keep your eyes and vision healthy.

For more on looking after your eyes visit [visionmatters.org.uk](https://www.visionmatters.org.uk)



National Eye Health Week is a public information campaign run by Eye Health UK (registered charity number 1086146).

## Free NHS eye tests

- You're entitled to a free NHS sight test if you:
- are under 16
- are 16, 17 or 18 and in full-time education (this includes being taught full-time at a school, college, university or at home)
- are 60 or over
- are registered as partially sighted or blind
- have been diagnosed with diabetes or glaucoma
- are 40 or over and your mother, father, sibling or child has been diagnosed with glaucoma
- have been advised by an eye doctor (ophthalmologist) that you're at risk of glaucoma
- are a prisoner on leave from prison
- are eligible for an NHS complex lens voucher – your optician can advise you about your entitlement

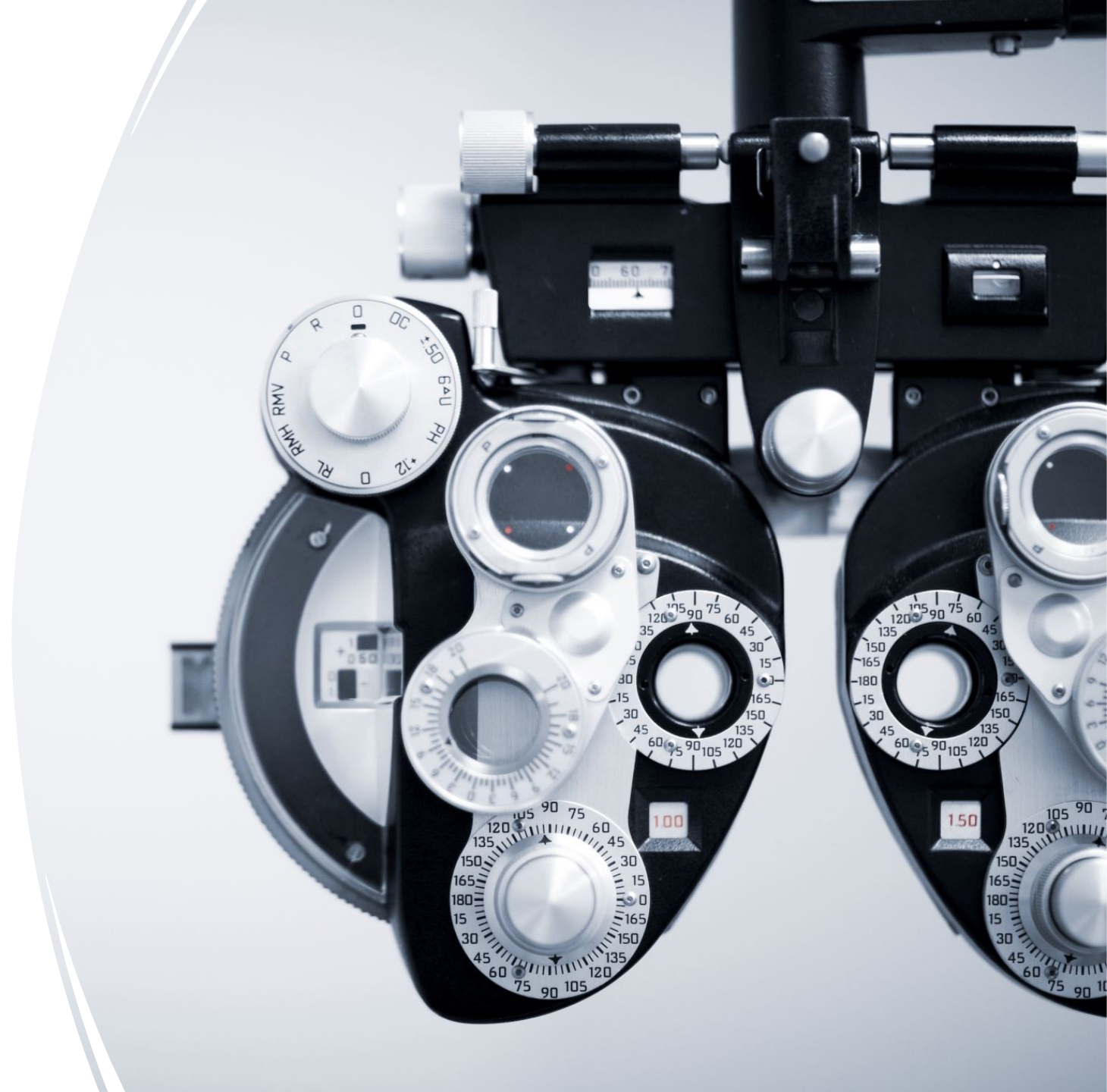
# Free NHS eye tests

- You're also entitled if you or your partner – including civil partner – receive, or you're under the age of 20 and the dependant of someone receiving:
  - Income Support
  - Income-based Employment and Support Allowance
  - Income-based Jobseeker's Allowance
  - Pension Credit Guarantee Credit
  - [Universal Credit and meet the criteria](#)
- If you're entitled to or named on:
  - a valid NHS tax credit exemption certificate (if you do not have a certificate, you can show your award notice), you qualify if you get Child Tax Credits, Working Tax Credits with a disability element (or both), and have income for tax credit purposes of £15,276 or less
  - a valid NHS certificate for full help with health costs (HC2)
  -

# Benefits of sight tests

---

- Many people think that a sight test is just about checking whether your vision needs correcting with glasses or contact lenses.
- But there are other important reasons to have a regular sight test.
- A sight test is a vital check on the health of the eyes and includes the detection of eye conditions.
- Many of these, if found early, can be treated successfully, avoiding potential sight loss.
- A sight test can also detect other health conditions such as high blood pressure or diabetes.



# Three Common MS Vision Problems and How to Manage Them

## Optic Neuritis

Usually occurs in one eye  
You may experience:

- Blurred vision
- Dim vision
- Loss of color vision
- Aching pain with eye movement

### How to Manage

- Most people with MS will recover the vision they lost.
- A short course of high-dose steroids may help speed recovery.

## Diplopia or Double vision

A hallmark of double vision is that if you cover one eye, you'll see a single image, but with both eyes, you'll see double.

### How to Manage

- Double vision may resolve on its own within weeks or months.
- High-dose steroids can help if double vision is associated with an MS relapse.
- An eye patch or glasses/contact lenses with prisms can help.

## Nystagmus

Nystagmus is rapid, involuntary shaking of the eyes — up and down, side to side or rotating.

### How to Manage

- Nystagmus may improve over time on its own.
- Managing MS is the best way to manage it.
- Your provider may prescribe medications.

**See your MS healthcare provider  
if you experience any of these symptoms.**





# Stroke-related visual difficulties

- Vision problems following a stroke are quite common
- The main types of eye problems that can occur after a stroke include:
  - visual field loss
  - eye movement problems and
  - visual processing problems.
- Vision can become :
  - blurry
  - double
  - unstable – objects move
- People can complain that :
  - sight is not as good
  - reading becomes harder
  - sensitive to light
  - difficulty judging depth and movement
  - see things that are not there – visual hallucinations
  - recognising objects & people is affected

# Visual field loss: **hemianopia**



This image shows a scene of a house with a garden as would be viewed with a full visual field.



This image shows the same scene as may be viewed with a left homonymous hemianopia. The left half of the scene is missing.

- A hemianopia is where there is a loss of one half of your visual field.
- The extent of field loss can vary and depends of the area of your brain that has been affected.



# Scanning exercises

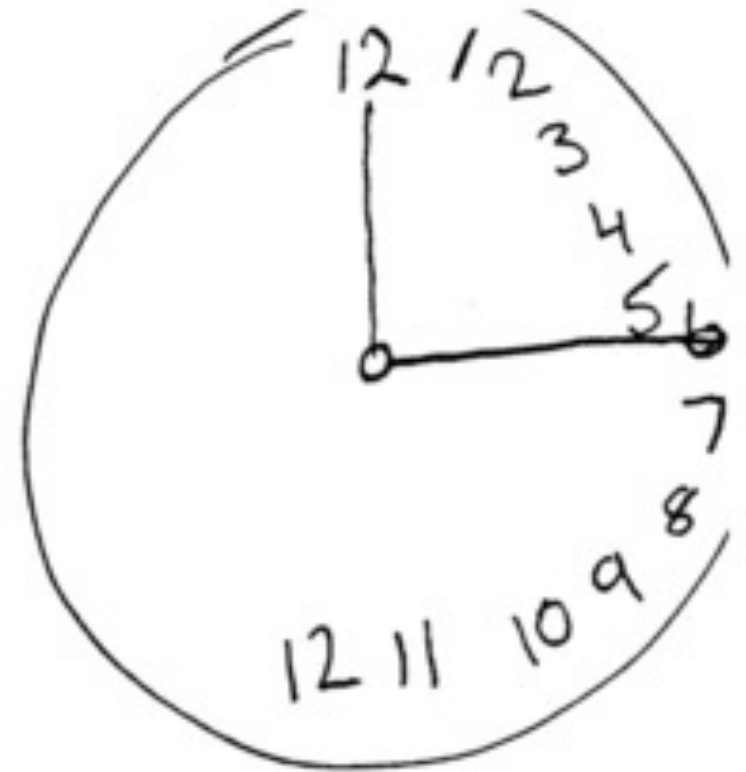
---

- Scanning exercises are easy to do and can be done in different ways.
- Practice scanning by keeping your head still and moving your eyes around the room to your affected side of vision.
- You could also use puzzles and word search games in books or on computers and tablet screens to improve your visual perception and visual-tracking skills.
- There are free scanning training programmes on the internet which can be helpful
- [Eye-Search](#)
- [Read-Right](#)
- [Durham Reading and Exploration Training](#)

# Neglect

---

- Visual neglect is more common when you have a stroke in the right side of the brain which affects the left side of the body.
- It results from an issue with attention not of visual field loss – this can occur when the parietal lobe of the brain is damaged
- In neglect of the personal space, individuals fail to be aware of one side of their own body. They may fail to dress, shave, or groom the affected side. In severe cases, individuals may deny ownership of the limbs on the affected side
- In neglect of the extrapersonal space, the individuals fail to acknowledge and respond to stimuli located in their extrapersonal space -



# Eye movement problems

---

- Damage to the nerves that control your eyes can lead to eye movement problems after a stroke which can result in both your eyes not working together as a pair.
- You may also experience weakness in your eye muscles, like difficulty or even inability to follow objects with your eyes (pursuit) or shift vision quickly from object to object (saccade) which may make it difficult for you to focus or track objects.
- In addition, your eyes may wobble (a condition known as [nystagmus](#)), or you may not be able to move both eyes together in a particular direction (gaze palsy).

# Difficulty recognising objects or people

---

- Visual agnosia" where they are able to see objects or people but have trouble in recognising them.
- Visual agnosia is a condition that affects how your brain processes what you see. Your vision works correctly, but the parts of the brain that perceive and interpret what you see are damaged and cause you difficulties in recognising objects, people, places and more.
- **Alexia** - can't recognize words you see. You can see the words but can't make sense of or read them. You can still write and speak without any problem
- **Prosopagnosia** also known as face blindness.- when you can't recognize a person's face even if you're familiar with them. You can still recognize them by other means, such as their voice or the sound of how they walk.

# Parkinson's-related Vision Changes

---

- **Double vision** can often occur because the eye muscles have trouble working together, especially to see up close (convergence insufficiency). Special prism glasses can often correct this.
- **Dry eye** due to decreased blinking is associated with PD and can cause blurry vision.
- **Blurry vision** can also be caused by PD medication, especially anticholinergics (such as trihexyphenidyl/Artane<sup>®</sup> or benzotropine/Cogentin<sup>®</sup>).
- **Trouble reading** can occur because the eye movements necessary to follow the lines of a page are slowed and have trouble starting (similar to gait freezing in the legs). Try blinking to change eye position. Levodopa can often help.
- **Trouble voluntarily opening the eyes**, known as eyelid apraxia. Treatments include "lid crutches" or botulinum toxin injections.



# Visual hallucinations

---

- Visual hallucinations due to a loss of vision known as Charles Bonnet syndrome.
  - If you lose all or part of your field of vision after a stroke, the brain might generate images to fill in the missing areas]
- Visual hallucinations in Parkinson's - hallucinations where you see people, particularly relatives, animals or even insects, that aren't there.
  - In PD can be a side effect of medication and more frequently occur in OFF periods of meds.
- Dementia
- Bad lighting can also be a cause of hallucinations so make sure you can see clearly in your home to rule
- Insomnia – frequently cited as cause for visual hallucinations



# Vision & balance

---

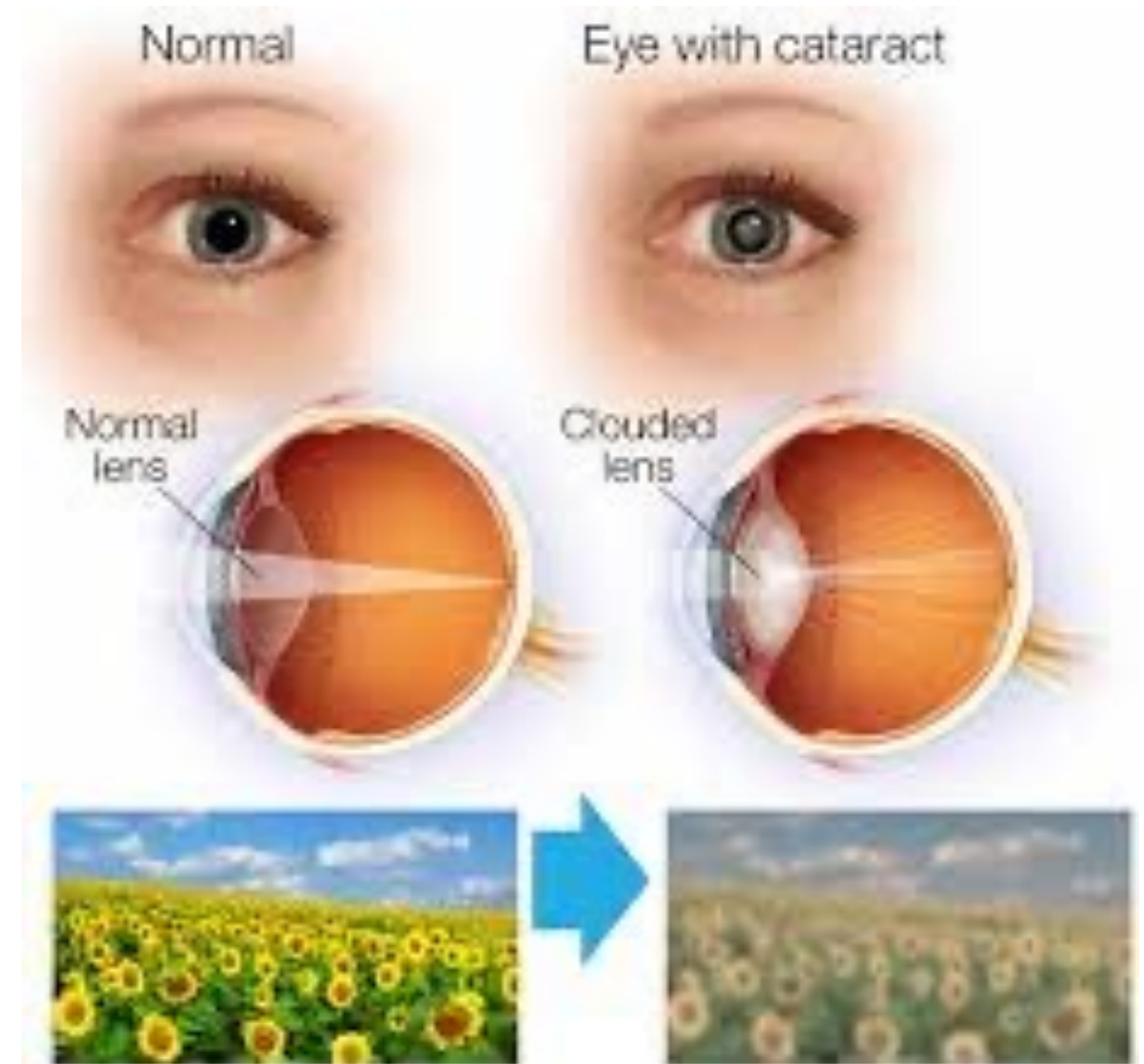
- Vision plays a significant role in our ability to balance, orient ourselves in space, and process movement of things in our environment.
- Balance - must organize and integrate information from:
  - Vision
  - Vestibular (inner ear)
  - Proprioception (muscles & joint receptors)



# Cataracts

---

- A cataract is a cloudy area in the lens of your eye (the clear part of the eye that helps to focus light).
- Cataracts are very common as you get older.
- Cataracts usually appear in both eyes. They may not necessarily develop at the same time or be the same in each eye.
- Surgery is the only treatment that's proven to be effective for cataracts.



# Glaucoma

---

- **Glaucoma is a common eye condition where the optic nerve, which connects the eye to the brain, becomes damaged.**
- It's usually caused by fluid building up in the front part of the eye, which increases pressure inside the eye.
- Glaucoma can lead to loss of vision if it's not diagnosed and treated early.
- It can affect people of all ages, but is most common in adults in their 70s and 80s.
- If you have glaucoma, you might have problems with some Parkinson's medications, such as anticholinergic drugs and levodopa. So you must tell your specialist or Parkinson's nurse if you have glaucoma.



Normal Vision



Early Glaucoma



Advanced Glaucoma



End Stage Glaucoma

# Help & tips



# Help & tips

---

- Make family, friends and carers aware of your visual field loss and how it affects you.
  - make sure to put any objects (e.g. hot drinks) on the side of your vision that you can see.
  - They should also position themselves on the side of your vision that you can see when they are talking to you.
- Some people find that they miss food on one side of the plate when eating.
  - Rotate your plate throughout your meal so that you are moving your food into the side of the vision that you can see.
- Taking part in an active lifestyle — moving and looking around, exercising and engaging with people — is important to eye health & can boost blinking and minimize eye dryness.
- Apply warm, moist compresses for eyelid irritation.
- Use artificial tears to moisten dry eyes.
- Help from sensory teams

# Mobilising with visual field loss or neglect

---

- Actively try to scan around your environment more by using head and eye movements to look towards the side with the visual field loss.
- If you are out with somebody else, ask that person to walk on the side with the visual field loss.
- Use a White cane:
  - Symbol canes simply make other people around you aware that you are visually impaired.
  - Long canes and guide canes can be used to find and avoid obstacles. These canes require training to learn how to use them effectively.



# Prisms & patches

---

- Prisms for eye movement problems are used to help eliminate double vision
  - Prism glasses are made with customized prism lenses that bend (refract) light entering the eyes to make sure the light falls in the same spot on both retinas, even though they are not aligned.
  - The lenses help the eyes work together to align the two images so that only one image is seen.
- Prisms can also help improve visual field
- The goal of wearing an eye patch is to eliminate double vision by blocking the images produced by one eye.





# Device Accessibility Settings- Android


---

- All devices (mobile phones, tablets, e-readers, laptops and desktop computers) have some accessibility settings. These may differ between handset models and software version.
- Access the following adaptations through the Accessibility Menu within Settings
- **Select to speak**
  - - Select items on the screen for them to be read out loud.
- **TalkBack**
  - - Audio describes what you touch and select on the screen
- **Font size**
  - - Make the text on the screen smaller or larger than default settings
- **Display size**
  - - Make the items on the screen smaller or larger than default settings
- **Magnify**
  - - Magnifies the whole screen

# Device Accessibility Settings- Apple

- Access these adaptations through the Accessibility menu within General settings
- **Voiceover**
  - - Speaks the text in documents and audio describes what appears on screen
- **Speak selection**
  - - Audio describes text you select on the screen
- **Speak screen**
  - - Audio describes the contents of the screen
- **Text size**
  - - Make the text on the screen smaller or larger than default settings





# Driving & vision

---

- Standards for driving require :
- a horizontal visual field of at least 120 degrees with at least 50 degrees on both the left and right.
- Most people with a hemianopia are unable to meet these standards and are **not** safe to drive.
- Any driver unable to meet the vision standards must **not** drive and must notify the DVLA.
- More detailed information about driving standards can be found on the GOV.UK website.

# Certificate of visual impairment

---

- The CVI form is issued to a patient assessed by a consultant ophthalmologist as being visually impaired
- They will will decide if you can be certified as:
  - severely sight impaired (blind) SSI or
  - sight impaired (partially sighted).
- Ophthalmologists should give a copy of the CVI form to the patient in whichever format is most accessible to them.



# Eye health professionals

---

- An **orthoptist** can assess and treat a range of vision problems, particularly eye movements.
- An **ophthalmologist** is a medical doctor who specialises in diagnosing and treating diseases of the eye. Only a consultant ophthalmologist can certify people as sight impaired.
- An **optometrist** (optician) tests sight, prescribes and dispenses glasses or contact lenses and can screen you for eye disease.
- **Support workers and eye clinic liaison officers (ECLOs)** can give additional support. They can provide you and your family or carer with information on practical aids and emotional support. ECLOs provide a bridge between the eye health professionals in hospital and other organisations that can provide you with support at home.
- **Visual rehabilitation officers** help you make use of your remaining vision and other skills to increase your independence

# Further help

---

- Other national charities that specialise in vision loss and you may find useful include:
- [RNIB](#)
- [Look After Your Eyes](#)
- [SeeAbility](#)
- [Vision, Orthoptoc and Brain Injury Research Unit](#)
- [The Macular Society](#) – helpline: 0300 303 0111
- [Glaucoma UK](#) – helpline: 01233 648170 or email [helpline@glaucoma.uk](mailto:helpline@glaucoma.uk)
- [Retina UK](#) – helpline: 0300 111 4000 or email: [helpline@retinuk.org.uk](mailto:helpline@retinuk.org.uk)
- [Diabetes UK](#) – 0345 123 2399 or email: [info@diabetes.org.uk](mailto:info@diabetes.org.uk)
- [Blind Veterans UK](#) – 0800 389 7979
- [Thomas Pocklington Trust](#)