

Eyes Right

Older people and driving



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Publication

This is an RCN practice guidance. Practice guidance are evidence-based consensus documents, used to guide decisions about appropriate care of an individual, family or population in a specific context.

Description

Eyesight deteriorates gradually with age. This publication has been developed to assist nurses working with older people who present with eyesight issues. It includes details on eye health, visual impairment and ageing, suggests nurses' responsibilities and signposts for further information.

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The Nine Quality Standards

These guidelines do not replace clinical assessment and any personal health queries or concerns should always be directed to an appropriate health care professional.

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Visual impairment and the older person

At least 2.2 billion people around the world have a vision impairment

(WHO, 2019)

Eyesight deteriorates gradually with age. It is possible to lose 40% of your vision before noticing a problem.

Health professionals should inform individuals of their responsibility to inform their driving licensing authority of double vision, reduced sharpness (visual acuity) or field of vision that affects driving.





International classification of visual impairment

The International Classification of Diseases 11 (2018) groups vision impairment into distance and near presenting vision impairment.

Distance vision impairment

Mild – visual acuity worse than 6/12 to 6/18

Moderate – visual acuity worse than 6/18 to 6/60

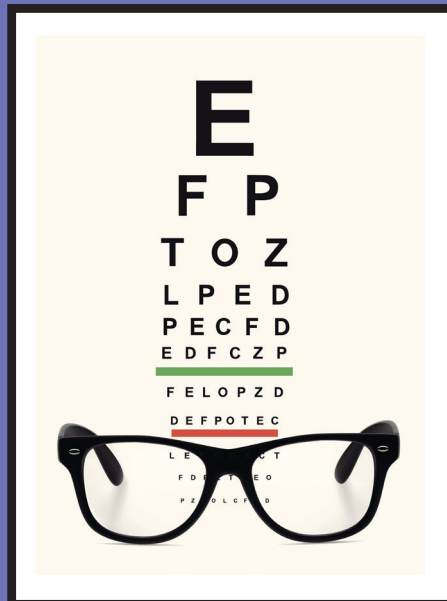
Severe – visual acuity worse than 6/60 to 3/60

Blindness – visual acuity worse than 3/60

Near vision impairment

Near visual acuity worse than N6 or M.08 at 40cm.

 [who.int/mediacentre/factsheets/fs282/en](https://www.who.int/mediacentre/factsheets/fs282/en)





Eye health and ageing

Deteriorating eyesight can be natural due to ageing and can cause:

- sensitivity to glare
- difficulties see close up
- need for more light
- changes in colour perception
- dryness of the eyes.



Driving and the older person

Most people with sight loss and blindness are over the age of 50 years.

Driving allows older people to maintain an active social life. It can help prevent loneliness, loss of independence, psychological and financial abuse.

Driving also contributes to self-confidence and identity.

The two main issues for older drivers are mobility and safety due to worsening eye health.



Sensitivity to glare and driving

Contrast sensitivity to glare increases significantly with age due to changes in the lens causing light entering through the aging cornea to scatter on the cornea, lens and retina rather than just focusing on the retina. It causes the appearance of excessively bright surfaces, eye irritation and difficulties in seeing objects on the road especially at night.

It can be especially difficult driving at night due to low lighting and glare from oncoming headlights or streetlights.

Health professionals should advise individuals affected by glare to inform their driving licensing authority if driving is affected.





Near vision and driving

With increasing age, the lens becomes thickened, stiff and less elastic. This makes it more difficult for the lens to change shape - the ciliary muscles in the eye must work harder to accommodate or see close-up objects. Older people tend to

experience presbyopia or long-sightedness.

Deterioration in vision might make it harder to see people, objects and movements outside the direct line of vision.



Driving and the need for more light

People over 60 need three times more ambient light for comfortable reading than those in their 20s.

Driving at night becomes difficult because the sphincter and dilator pupillary muscle lose strength to control the pupil size and reaction to light. This results in the pupil being smaller and less responsive to changes in ambient lighting.



Image from: theoldish.com/brighter-headlights-a-problem-for-older-drivers



Colour perception and driving

Changes in colour perception

With age, the normally clear lens located inside your eye may start to discolour or turn yellow. This makes it harder to see and distinguish between certain colour shades.

Measuring colour perception

To assess colour perception a health professional will ask the

patient to cover one eye at a time and look at each Ishihara plate for three seconds. The accuracy and speed in identifying a colour Ishihara is marked out of the total number of plates shown. Colours are reduced when there is a field defect in the vision. In most instances, people with colour deficiency are able to drive.

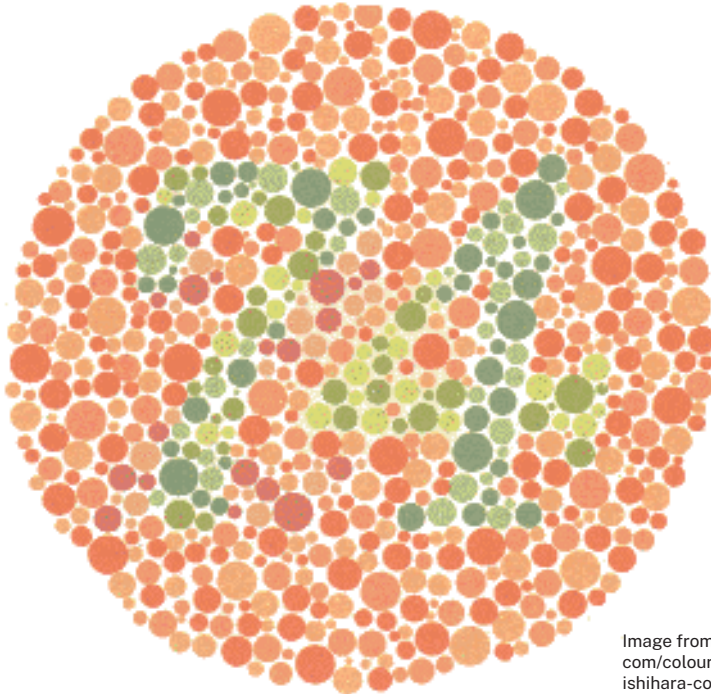


Image from: colour-blindness.com/colour-blindness-tests/ishihara-colour-test-plates



Dry eyes and driving

With age, the oil and tear glands produce less moisture. Having inadequate tears makes the corneal surface of the eye irregular and reduces visual function by decreasing contrast sensitivity and functional visual acuity. It also causes the lacrimal glands to produce more tears, causing “watering eyes”. This significantly impacts the ability of a person to drive.



Health professionals should advise older people that over-the-counter lubricants can be used and that tearing be assessed to ensure the condition is adequately managed.



Eye diseases and driving

Deterioration of vision can also be caused by a pre-existing eye condition. The level of vision may fail to meet the visual standards of driving and affect a person’s ability to drive.

By searching the Driver and Vehicle Licensing Agency’s (DVLA) A to Z website, health professionals can check and advise patients of medical

conditions that may affect driving.

Rare eye conditions such as blepharospasm and more common conditions such as glaucoma, cataracts, macular degeneration and diabetic retinopathy can cause blindness which affects approximately one in three persons by the age of 65 years (WHO, 2014).



Blepharospasm and driving



Image from: <https://journals.healio.com/doi/10.3928/1542-8877-19861101-11>

Blepharospasm causes blinking or spasmodic closing of the eyes occurs at an increased rate. Severe spasms of the eyelid interrupts useful vision. Evidence has reported successful treatment with botulinum toxin to reduce the severity of the condition to enable driving. Health professionals should advise patients to inform the DVLA.



Glaucoma and driving

Glaucoma is a group of diseases that can damage the eye's optic nerve and result in vision loss and blindness. It affects approximately 7.7 million people worldwide (WHO, 2021). It occurs when there is a build-up of fluid in the front of the eye. The extra fluid increases the pressure within the eye and damages the optic nerve affecting the field of vision.

If one eye is affected and the other has a normal field of



Image from: <https://dmei.org/blog/what-does-a-person-with-glaucoma-see>

vision, an individual can usually drive but must be advised to inform the driving agency if there is a medical condition in the other eye and they can't meet the visual standards for driving.

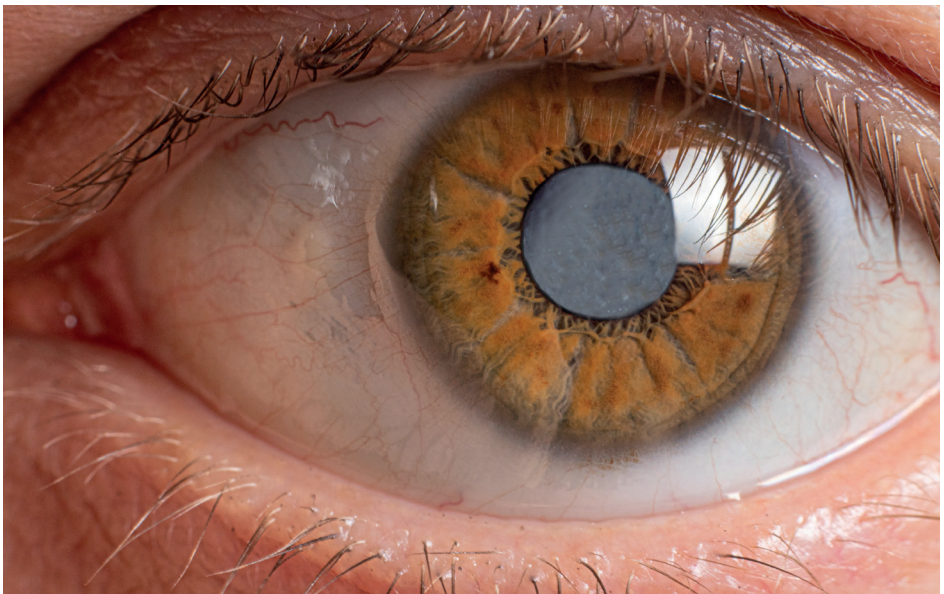


Cataract and driving

Cataract is a clouding of the eye's lens and is the leading cause of blindness worldwide. It is caused by a build-up of proteins on the normal transparent lens inside of the eye causing blurred vision and eventually blindness. According to the World Health Organization (2019) cataract affects approximately 94 million people worldwide causing moderate to severe vision loss. It affects driving because of the following effects:

- light sensitivity
- double vision
- halos
- reduction in colours.

Health professionals should advise patients with the above signs and symptoms to see an ophthalmologist. Patients should usually be advised that they do not need to inform the driving licensing authority if they have, or have had, cataracts and still meet the visual standards for driving.





Macular degeneration (AMD)

The macular is the central part of the eye responsible for central vision, for seeing objects clearly and for common daily tasks such as reading and driving. It affects the area and the middle part of your vision. AMD is a leading cause of blindness in people aged 65 and is estimated to affect 67 million people in Europe that are moderately to severely affected (Li J Q, et al., 2020).

This usually happens gradually over time. Health professionals should check visual distortion with a Amsler grid and advise undiagnosed patients with blurred vision and dark spots or gaps in their vision that change shape, size, colour and those experiencing difficulties with uncomfortable bright light or glare and adapting from dark to light environment to see an ophthalmologist.

Health professionals should inform people who do not meet the 'visual standards for driving' to tell their driving licensing authority if AMD affects both eyes.



Image from: <https://dmei.org/blog/what-does-a-person-with-glaucoma-see>

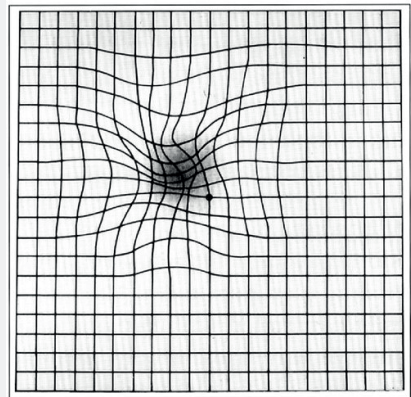


Image from: <https://dmei.org/blog/what-does-a-person-with-glaucoma-see>



Diabetic retinopathy

Diabetic retinopathy (DR) is a common complication of diabetes. Diabetic retinopathy is caused by high blood sugar levels damaging the small blood vessels on the retina layer of the eye. It can cause loss of vision if left untreated or undiagnosed. Symptoms include:

- gradually worsening vision
- sudden vision loss
- shapes floating in your field of vision (floaters)
- blurred or patchy vision
- eye pain or redness.

Health professionals should ensure that all patients with diabetes are referred to the Diabetic Eyes Screening Service and encourage regular attendance.

Health professional should inform individuals to tell their driving licensing authority if they have, or have had, retinopathy in both eyes or in their only functioning eye.



Image from: <https://i1.wp.com/www.freedomeyelaser.com.au>



Eye health professional safeguarding role

To assess vision eye health professionals undertake various tests to ensure an individual's safety. They also offer advice on how to report to DVLA failure to meet the visual standards for driving.

A health professional's actions can help individuals remain safe and not incur DVLA fines or prosecution if an accident occurs as a result.



Reporting to the DVLA

Health professionals should advise and share the following links with patients. People approaching their 70th birthday, should be sent a D46P form by the DVLA and every three years afterwards. If a D46P form is not received a D1 application can be sourced from the Post Office.

 gov.uk/renew-driving-licence-at-70

If the patient is a car driver, a V1 form should be completed.

 gov.uk/government/publications/v1-online-confidential-medical-information


For bus, coach and lorry drivers, a V1V form should be completed by the applicant and their GP or specialist consultant for a DVLA assessment.

 gov.uk/government/publications/v1v-online-confidential-medical-information




Reporting diabetes to the DVLA

Diabetic retinopathy car and motorbike users


 gov.uk/government/publications/diab1-confidential-medical-information

Bus, coach and lorry drivers, depending on whether their diabetes is controlled, should fill one of the three relevant forms:


Insulin

 https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/709784/vdiab1i-online-medical-form.pdf

Sulphonylurea or glinide tablets (or both)

 https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/709782/vdiab1sg-medical-questionnaire.pdf

Other tablets or non-insulin injections

 https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/709789/vdiab1gen-confidential-medical-info.pdf





Driving license authorities

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



Drivers Medical Enquiries

T: 0300 790 6806

E: eftd@dvla.gls.gov.uk

Address: Drivers Medical Enquiries,
DVLA Swansea SA99 1TU

Northern Ireland Driver and Vehicle Agency (DVA)



T: 08454 024 000

E: dva@doeni.gov.uk

Isle of Man IOM Licensing Department



T: 0162 698 525/686 836

E: licensing@iompost.com

Channel Islands Vehicle Registration and Licensing Department (VRLD)



T: 01481 243 400

E: info@gov.gg

Government advice on driving eyesight rules is available at:



www.gov.uk/driving-eyesight-rules



Duty of care to older drivers with deteriorating vision

Before the driving agency sends a decision letter or renews one, two, three or five year's medical driving license they might investigate by contacting a doctor or consultant, arranging an examination asking that a driving assessment, an eyesight, or driving test be undertaken.

The nurse should advise that under section 88 of The Road Traffic Act 1988 a patient can continue to drive during investigation.



Please see:

[gov.uk/reapply-driving-licence-medical-condition](https://www.gov.uk/reapply-driving-licence-medical-condition)


If unsure it should be discussed with an ophthalmologist.




Sources of support

Anyone can contact their local council for a needs assessment which can be completed over the phone or in person.

RNIB Helpline

 T: 0303 123 9999

RNIB Support

 E: eyehealth@rnib.org.uk

England and Wales

 rnib.org.uk/registration

In England and Wales the certificate is called the Certificate of Vision Impairment (CVI), in Scotland it's called BP1, and in Northern Ireland it's called A655.

England and Wales CVI and registration of a visual impairment.

 gov.uk/government/publications/guidance-published-on-registering-a-vision-impairment-as-a-disability

Scotland CVI registration

 isdscotland.org/Health-Topics/Eye-Care/Certificate-of-Vision-Impairment/_docs/CVI-Data-Protection-Notice.docx

Sources of support

Patient Referral Northern Ireland A655



rcophth.ac.uk/professional-resources/certificate-of-vision-impairment

Social care support

In England, local authorities have a legal obligation under the Care Act 2014 to help people with sight loss develop practical skills and strategies to maintain independence, including:

- at least six weeks of free vision rehabilitation
- free community equipment, including minor adaptations to the home where this costs £1,000 or less.

If you are based in England and are having difficulties accessing this support, please read and complete the *Staying Independent toolkit*: accessing rehabilitation and equipment at:



who.int/publications/i/item/9789241516570

A health professional who feels someone is losing vision and needs help to cope can request a needs assessment from the local council.





The importance of rehabilitation for visual impairment

Advice should be given to people with visual impairment to inform the local authority or health and social care trust of their need for support as there is a legal duty to carry out an assessment.

An individual may be offered support by a sensory impairment team at the local authority or health and social care trust, which can provide sight loss specific support, such as visual impairment rehabilitation.

Visual rehabilitation is a period of training delivered by rehabilitation officers, often called ROVIs. The rehabilitation and support are designed to help people with sight loss maintain their independence through re-learning practical daily and mobility skills.

For further information please advise patients to contact:





Awareness of social care available for people with sight loss

Health professionals should signpost people to the social support available so they can lead an independent life. Support available includes:

- visual impairment rehabilitation including mobility training and daily living skills example white canes, lighting, screen readers
- personal care at home
- domestic help
- answering correspondence
- help with shopping
- services in day centres
- care in residential or nursing homes
- provision of equipment, aids and minor adaptations to the home example magnification software, grab rails, tactile watches and alarm clocks, non-slip flooring.





General advice

- It is advisable that a two-yearly eye test should be undertaken.
- In the event of sudden loss of vision, a patient should be advised to attend an eye centre or eye unit.
- To maintain the standards of vision for driving, health professionals should inform patients of the importance of wearing glasses or contact lenses, if prescribed, every time they drive.
- It is advisable to inform people with sight loss that the driving licensing authority should be informed if they have a problem that affects both their eyes, or a remaining only eye.
- It is not necessary for people with long or short sightedness or those having eye surgery to inform the driving licensing authority of such.



Useful links



elsevier.com/books/kanskis-clinical-ophthalmology/salmon/978-0-7020-7711-1



cdc.gov/visionhealth/basics/ced/index.html



bausch.com/your-eye-concerns/diseases-and-disorders




onhealth.com/content/1/common_eye_conditions




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(accessed 9 September 2021)

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 who.int/news-room/fact-sheets/detail/blindness-and-visual-impairment
(accessed 9 September 2021)



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